

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1808cxt

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT 19	BEILSTEIN updated with new compounds
NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
NEWS	8	DEC 14	BEILSTEIN pricing structure to change
NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
NEWS	12	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	14	DEC 17	CA/CAPplus enhanced with new custom IPC display formats
NEWS	15	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN 02	STN pricing information for 2008 now available
NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:36:40 ON 20 MAR 2008

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 08:36:55 ON 20 MAR 2008

69 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s (castanea (p) (sativa or vesca or vulgaris)) or sweet chestnut or spanish chestnut) (p) extract#### (p) leaf
UNMATCHED RIGHT PARENTHESIS 'CHESTNUT) '

The number of right parentheses in a query must be equal to the number of left parentheses.

=> s ((castanea (p) (sativa or vesca or vulgaris)) or sweet chestnut or spanish chestnut) (p) extract#### (p) leaf

- 0* FILE ADISNEWS
- 10 FILE AGRICOLA
- 2 FILE ANABSTR
- 0* FILE ANTE
- 0* FILE AQUALINE
- 2* FILE BIOENG
- 20 FILE BIOSIS
- 1* FILE BIOTECHABS
- 1* FILE BIOTECHDS
- 4* FILE BIOTECHNO
- 33 FILE CABA
- 28 FILE CAPLUS
- 0* FILE CEABA-VTB
- 0* FILE CIN

19 FILES SEARCHED...

- 2 FILE CROPU
- 2 FILE DDFU
- 3 FILE DRUGU
- 5 FILE EMBASE
- 11* FILE ESBIODASE
- 0* FILE FOMAD
- 0* FILE FOREGE
- 1* FILE FROSTI
- 1* FILE FSTA

36 FILES SEARCHED...

- 2 FILE IFIPAT
- 0* FILE KOSMET
- 3 FILE LIFESCI

```

3   FILE MEDLINE
0*  FILE NTIS
0*  FILE NUTRACEUT
16* FILE PASCAL
0*  FILE PHARMAML
11  FILE SCISEARCH
60 FILES SEARCHED...
9   FILE USPATFULL
1   FILE VETU
1*  FILE WATER
3   FILE WPIDS
3   FILE WPINDEX

```

26 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX

L1 QUE ((CASTANEA (P) (SATIVA OR VESCA OR VULGARIS)) OR SWEET CHESTNUT OR SPANISH CHESTNUT) (P) EXTRACT#### (P) LEAF

=> d rank

```

F1      33   CABA
F2      28   CAPLUS
F3      20   BIOSIS
F4      16*  PASCAL
F5      11   SCISEARCH
F6      11*  ESBIOBASE
F7      10   AGRICOLA
F8       9   USPATFULL
F9       5   EMBASE
F10     4*   BIOTECHNO
F11      3   DRUGU
F12      3   LIFESCI
F13      3   MEDLINE
F14      3   WPIDS
F15      3   WPINDEX
F16      2   ANABSTR
F17      2   CROPU
F18      2   DDFU
F19      2   IFIPAT
F20     2*   BIOENG
F21      1   VETU
F22     1*   BIOTECHABS
F23     1*   BIOTECHDS
F24     1*   FROSTI
F25     1*   FSTA
F26     1*   WATER

```

=> file f1-20 f5-7 f9 f11-13 f16-18 f21
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
3.25	3.46

FULL ESTIMATED COST

FILE 'CABA' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 CAB INTERNATIONAL (CABI)

FILE 'CAPLUS' ENTERED AT 08:39:53 ON 20 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 08:39:53 ON 20 MAR 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'PASCAL' ENTERED AT 08:39:53 ON 20 MAR 2008
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2008 INIST-CNRS. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 08:39:53 ON 20 MAR 2008
Copyright (c) 2008 The Thomson Corporation

FILE 'ESBIOBASE' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'AGRICOLA' ENTERED AT 08:39:53 ON 20 MAR 2008

FILE 'USPATFULL' ENTERED AT 08:39:53 ON 20 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 08:39:53 ON 20 MAR 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'DRUGU' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'LIFESCI' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

FILE 'MEDLINE' ENTERED AT 08:39:53 ON 20 MAR 2008

FILE 'WPIDS' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'ANABSTR' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (c) 2008 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'CROPU' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'IFIPAT' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 IFI CLAIMS(R) Patent Services (IFI)

FILE 'BIOENG' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

FILE 'VETU' ENTERED AT 08:39:53 ON 20 MAR 2008
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

=> s 11

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'CASTANEA (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'CHESTNUT) (P) EXTRACT##'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACT#### (P) LEAF'

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CASTANEA (P) '
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CHESTNUT) (P) EXTRACT##'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACT#### (P) LEAF'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CASTANEA (P) '
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CHESTNUT) (P) EXTRACT##'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACT#### (P) LEAF'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CASTANEA (P) '
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'CHESTNUT) (P) EXTRACT##'
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'TRACT#### (P) LEAF'
 L2 168 L1

=> dup rem l2
 PROCESSING COMPLETED FOR L2
 L3 74 DUP REM L2 (94 DUPLICATES REMOVED)

=> d bib abs 1-74

L3 ANSWER 1 OF 74 USPATFULL on STN DUPLICATE 1
 AN 2007:271621 USPATFULL
 TI Cosmetic Composition Comprising an Extract of the
 Leaves of the Castanea Sativa Plant and
 Cosmetic Treatments
 IN Henry, Florence, Villers-les-Nancy, FRANCE
 Danoux, Louis, Saulzures les Nancy, FRANCE
 Pauly, Gilles, Nancy, FRANCE
 PI US 2007237847 A1 20071011
 AI US 2005-597964 A1 20050204 (10)
 WO 2005-EP1105 20050204
 20070116 PCT 371 date
 PRAI EP 2004-290388 20040213
 DT Utility
 FS APPLICATION
 LREP COGNIS CORPORATION, PATENT DEPARTMENT, 300 BROOKSIDE AVENUE, AMBLER, PA,
 19002, US
 CLMN Number of Claims: 20
 ECL Exemplary Claim: 1-10
 DRWN No Drawings
 LN.CNT 1125
 AB The present invention is concerned with a composition comprising an
 extract of the leaves of the plant Castanea
 sativa. It is furthermore concerned with the use of this
 extract for the manufacture of a cosmetic composition and with
 the use of this extract for the cosmetic treatment of the
 human body.

L3 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:968948 CAPLUS
 DN 147:307501
 TI Skin-calming oxidative hair treatment
 IN Seiler, Martina; Hollenberg, Detlef; Doering, Thomas
 PA Henkel Kommanditgesellschaft Auf Aktien, Germany
 SO PCT Int. Appl., 65pp.

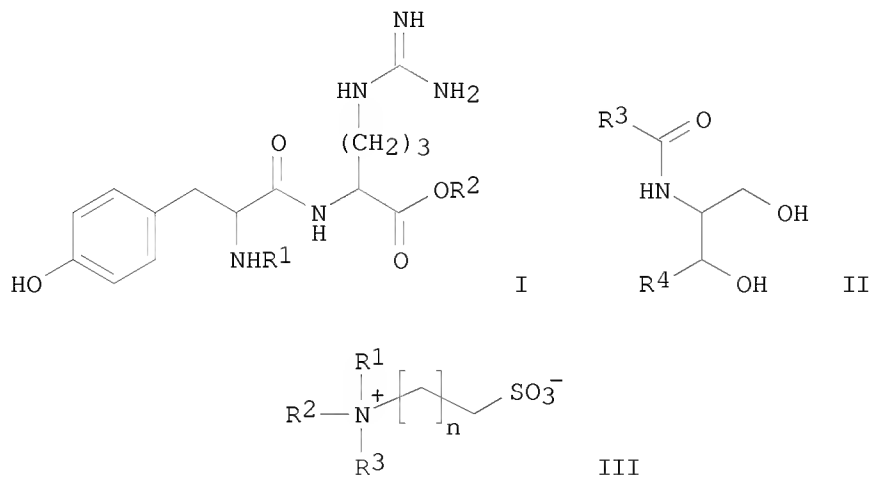
CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007096045	A1	20070830	WO 2007-EP841	20070201
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	DE 102006060944	A1	20070830	DE 2006-102006060944	20061220
PRAI	DE 2006-102006008355	A	20060221		
	DE 2006-102006060944	A	20061220		
OS	MARPAT 147:307501				
GI					



AB The skin is subjected to stress when using oxidative cosmetics. The cosmetic use of at least one representative of the group which is formed from compds. according to formula (I), in which R1 is a C2- to C12-acyl group and R2 is a C2- to C30-alkyl group, Theobroma cacao extract, compds. according to formula (II), in which R3 is a linear C12- to C30-alkyl group or a saturated or unsatd. ω-(C12- to C20)-acyloxy-(C12-C30)-alkyl group (such as, preferably, tricosanyl, heptadecanyl or ω-(octadeca-9,12-dienoyloxy)nonacosanyl) and R4 is a saturated or unsatd. C15-alkyl group or a saturated or unsatd. C15-hydroxyalkyl group (such as, for example, pentadeca-1-en-1-yl, 3-hydroxypentadeca-1-en-1-yl, 1-hydroxypentadecanyl), hydrolyzed yeast extract, hydrolyzed lupin protein, in particular from Lupinus albus, rosemary extract, Castanea sativa extract, Mentha piperita leaf extract, N-(C8- to C30)-acyl-4-hydroxyproline (C8- to

C30)-alkyl ester, cholesterol, compds. of the formula (III), in which R1, R2 and R3, independently of one another, are a hydrogen atom, -CH3, -CH2CH3, -CH(CH3)2, -CH2CH2CH3, -CH(CH3)CH2CH3, -CH2CH(CH3)2, -C(CH3)3, n is 1 or 2, linoleic acid, vitamin C and derivs. thereof and niacinamide offers the user of oxidative hair-treatment compns. the possibility of reducing this stress, calming the skin and in particular reducing skin dryness and itching. A corresponding method for calming skin and the compns. that can be used therein are likewise described. Thus a dying cream contained (weight/weight%): Hydrenol D 8.2; Lorol 2.7; Texapon NSO 3.5; Plantapon LCG 3.5; Eumulgin B1 0.5; Eumulgin B2 0.5; isostearic acid 2.0; myristic acid 0.5; potassium hydroxide (50%) 1.2; p-tolylenediamine 1.43; resorcin 0.55; m-aminophenol 0.15; 3-amino-2-methylamino-6-methoxypyridine 0.04; ammonia 7.2; sodium sulfite 0.5; ascorbic acid 0.4; Turpinal SL 0.2; sodium water glass 40/42 0.5; perfume 0.5; ammonium sulfate 0.5; Calmosensine 2.0; water to 100. The developer included (weight/weight%): ammonia (25%) 0.62; dipicolinic acid 0.10; disodium dihydrogen pyrophosphate 0.03; Turpinal SL 1.50; Dow Corning DB 110A 0.07; Aculyn 33A 12.00; hydrogen peroxide (50%) 12.00; water to 100. Hair cream and developer were mixed 1:1 upon application.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 74 USPATFULL on STN
AN 2007:256288 USPATFULL
TI Cosmetic composition comprising Seabuckthorn
IN Gibbons, Clyde, Staines, UNITED KINGDOM
Watson, Andrew David, Redhill, UNITED KINGDOM
Morris, Sian, Bracknell, UNITED KINGDOM
PA The Procter & Gamble Company (non-U.S. corporation)
PI US 2007224229 A1 20070927
AI US 2007-726041 A1 20070320 (11)
PRAI EP 2006-5854 20060322
DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION - WEST
BLDG., WINTON HILL BUSINESS CENTER - BOX 412, 6250 CENTER HILL AVENUE,
CINCINNATI, OH, 45224, US
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 661
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cosmetic compositions are provided comprising a hydrophilic extract of
Seabuckthorn and a hydrophilic vitamin component. The cosmetic use of
that composition is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 74 USPATFULL on STN
AN 2007:256197 USPATFULL
TI Cosmetic composition comprising ginkgo biloba and sunscreen agents
IN Gibbons, Clyde, Staines, UNITED KINGDOM
PA The Procter & Gamble Company (non-U.S. corporation)
PI US 2007224138 A1 20070927
AI US 2007-725780 A1 20070320 (11)
PRAI EP 2006-5853 20060322
DT Utility
FS APPLICATION
LREP THE PROCTER & GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION - WEST
BLDG., WINTON HILL BUSINESS CENTER - BOX 412, 6250 CENTER HILL AVENUE,
CINCINNATI, OH, 45224, US
CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 705

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cosmetic composition is provided comprising a Gingko biloba extract, an alkyl β,β -diphenylacrylate and/or α -cyano β,β -diphenylacrylate derivative, and a dibenzoyl methane derivative. A cosmetic use of that composition is also provided for preventing sun damage and photo ageing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1371194 CAPLUS

DN 148:190552

TI Antioxidant activities of the extracts from chestnut flower, leaf, skins and fruit

AU Barreira, Joao C. M.; Ferreira, Isabel C. F. R.; Oliveira, M. Beatriz P. P.; Pereira, Jose Alberto

CS CIMO/Escola Superior Agraria, Instituto Politecnico de Braganca, Braganca, 5301-855, Port.

SO Food Chemistry (2007), Volume Date 2008, 107(3), 1106-1113
CODEN: FOCHDJ; ISSN: 0308-8146

PB Elsevier B.V.

DT Journal

LA English

AB In this study, the antioxidant properties of chestnut (flowers, leaves, skins and fruits) exts. were evaluated through several biochem. assays: DPPH (2,2-diphenyl-1-picrylhydrazyl) radical-scavenging activity, reducing power, inhibition of β -carotene bleaching, inhibition of oxidative hemolysis in erythrocytes, induced by 2,2'-azobis(2-amidinopropane)dihydrochloride (AAPH), and inhibition of lipid peroxidn. in pig brain tissue through the formation of thiobarbituric acid-reactive substances (TBARS). These assays have been extensively studied as models for the peroxidative damage in biomembranes. The EC50 values were calculated for all the methods in order to evaluate the antioxidant efficiency of each chestnut extract. The phenol and flavonoid contents were also obtained. Chestnut skins revealed the best antioxidant properties, presenting much lower EC50 values, particularly for lipid peroxidn. inhibition in the TBARS assay. Furthermore, the highest antioxidant contents (polyphenols and flavonoids) were found for these exts.

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 2

AN 2007:205357 CABA

DN 20073218181

TI Antityrosinase activity of some plant extracts and formulations containing ellagic acid

AU Ozer, O.; Mutlu, B.; Kvcak, B.

CS Department of Pharmaceutical Technology, Faculty of Pharmacy, Ege University, 35100 Bornova, Izmir, Turkey. ozgen.ozar@ege.edu.tr

SO Pharmaceutical Biology, (2007) Vol. 45, No. 6, pp. 519-524. 25 ref.
Publisher: Informa Healthcare. New York
ISSN: 1388-0209

URL: <http://journalsonline.tandf.co.uk/link.asp?id=103117>

DOI: 10.1080/13880200701446746

CY United States

DT Journal

LA English

ED Entered STN: 5 Oct 2007

Last Updated on STN: 5 Oct 2007

AB Ellagic acid (EA) is a naturally occurring polyphenol found in a variety of plants in its free form or in the form of ellagitannin glycosides. In this study, the ellagic acid content of the methanol extracts of *Juglans regia* L. (Juglandaceae) leaves, *Castanea sativa* Mill. (Fagaceae) stem bark, and *Eucalyptus camaldulensis* Dehnh. (Myrtaceae) leaves was determined to develop melanogenesis inhibitors. An improved NaNO₂ assay was used for determination of EA. The tyrosinase inhibitory activity of the extracts and synthetic EA was tested in vitro by monitoring the appearance of dopachrome, an intermediate in the melanogenesis process. The results were compared keeping the same total concentration of inhibitor. The efficacy of EA (1%) was compared with arbutin (1%) and hydroquinone monomethyl ether (1%) as reference substances, and it was found to be a more efficient suppressor of pigmentation. The effect of formulation variables on the tyrosinase inhibitory activity was also evaluated. Based on dopachrome tests performed in the formulations, it could be concluded that the combination with plant extracts had a synergistic effect, and gel formulation could be suggested as an effective carrier for treating uneven skin pigmentation.

L3 ANSWER 7 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 3
AN 2007:162001 CABA
DN 20073137534
TI Identification of phenolic compounds from medicinal and melliferous plants, and their cytotoxic activity in cancer cells
AU Alesiani, D.; Pichichero, E.; Canuti, L.; Cicconi, R.; Karou, D.; D'Arcangelo, G.; Canini, A.
CS Department of Biology, University of Rome "Tor Vergata", Via della Ricerca Scientifica, 1-00133 Rome, Italy. canini@uniroma2.it
SO Caryologia, (2007) Vol. 60, No. 1/2, pp. 90-95. 36 ref.
Publisher: Department of Plant Biology, University of Florence. Florence
Price: Journal article; Conference paper .
Meeting Info.: Annual meeting of the Cell and Molecular Biology Group and of the Biotechnology group of the Italian Botanical Society (Societa Botanica Italiana), 26-28 June 2006, Alessandria, Italy.
ISSN: 0008-7114

CY Italy
DT Journal
LA English

ED Entered STN: 7 Sep 2007
Last Updated on STN: 7 Sep 2007

AB A phytochemical analysis and biological screening of vegetable extracts from *Sida acuta* and *Malva sylvestris* leaves, and *Castanea sativa* and *Eucalyptus camaldulensis* pollen were conducted. Solid phase extraction, and analyses with liquid chromatography and mass spectrometry (HPLC-MS) allowed the identification of 5,7-dimethoxycoumarin, kaempferol, quercetin, genistein, apigenin and myricetin. The *M. sylvestris* and *S. acuta* extracts demonstrated a cytotoxic activity on murine and human cancer cell lines in an MTT assay.

L3 ANSWER 8 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
AN 2007:799086 CAPLUS
DN 148:266205
TI Environmental impact of magmatic fluorine emission in the Mt. Etna area
AU Bellomo, Sergio; Aiuppa, Alessandro; D'Alessandro, Walter; Parello, Francesco
CS Dipartimento CFTA, Universita di Palermo, Palermo, 90123, Italy
SO Journal of Volcanology and Geothermal Research (2007), 165(1-2), 87-101
CODEN: JVGRDQ; ISSN: 0377-0273
PB Elsevier B.V.
DT Journal

LA English

AB The sustained and uninterrupted plume degassing at Mount Etna volcano, southern Italy, represents the troposphere's most prominent natural source of fluorine. Of the .apprx. 200 Mg of fluorine (as HFg) emitted daily by the volcano, 1.6 ± 2.7 Mg are deposited by wet and dry deposition. Fluorine-deposition via volcanic ash, here characterized for the first time, can be quite significant during volcanic eruptions (i.e. 60 Mg of fluorine were deposited during the 2001 eruption through volcanic ash, corresponding to .apprx. 85% of the total fluorine deposition). Despite the fact that these depositions are huge, the fate of the deposited fluorine and its impact on the environment are poorly understood. We herein present original data on fluorine abundance in vegetation (Castanea Sativa and Pinus Nigra) and andosols from the volcano's flank, in the attempt to reveal the potential impact of volcanogenic fluorine emissions. Fluorine contents in chestnut leaves and pine needles are in the range 1.8-35 $\mu\text{g/g}$ and 2.1-74 $\mu\text{g/g}$ resp.; they exceed the typical background concns. in plants growing in rural areas, but fall within the lower range of typical concns. in plants growing near high fluorine anthropogenic emission sources. The rare plume fumigations on the lower flanks of Mt Etna (distance > 4 km from summit craters) are probably the cause of the "undisturbed" nature of Etnean vegetation: Climatic conditions, which limit the growth of vegetation on the upper Regione Deserta, are a natural limit to the development of more severe impacts. High fluorine contents, associated with visible symptoms, were only measured in pine needles at three sites, located near recently-active (2001 to 2003) lateral eruptive fractures. Total fluorine contents (FTOT) in the Etnean soils have a range of 112-341 $\mu\text{g/g}$, and fall within the typical range of undisturbed soils; fluorine extracted with distilled water (FH2O) have a range of 5.1 to 61 $\mu\text{g/g}$ and accounts for 2-40% of FTOT. FH2O is higher in topsoils from the eastern flank (downwind), while it decreases with depth in soil profiles and on increasing soil grain size (thereby testifying to its association with clay-mineral-rich, fine soil fractions). The fluorine adsorption capacity of the andosols acts as a natural barrier that protects the groundwater system.

RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 74 USPATFULL on STN

AN 2006:261106 USPATFULL

TI Use of plant extracts for tinting the skin as a function of its phototype

IN Perrier, Eric, Les Cotes D'Arey, FRANCE

Abdul-Malak, Nabil, Caluire, FRANCE

PA Engelhard Lyon, Lyon, FRANCE (non-U.S. corporation)

PI US 2006222619 A1 20061005

AI US 2005-177698 A1 20050707 (11)

PRAI FR 2005-3171 20050331

DT Utility

FS APPLICATION

LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903, US

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 868

AB The invention discloses a method for tinting, for coloring skin, or for increasing the tanned appearance of skin comprising the use of an extract of a plant from the family of Compositae or Asteraceae, preferably an extract of chicory (Cichorium intybus L.), and a method of screening a plant for the manufacture of a cosmetic composition for coloring, particularly for tinting, at least one part of skin.

L3 ANSWER 10 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:126053 CAPLUS
DN 147:16790
TI TLC and HPLC-MS detection of chrysin in leaf buds used in phytotherapy
AU Peev, Camelia; Vlase, Laurian; Dehelean, Cristina; Soica, Codruta; Tamas, Mircea
CS Fac. Farm., Univ. Med. Farm. "Victor Babes", Timisoara, 300041, Rom.
SO Revista de Chimie (Bucharest, Romania) (2006), 57(12), 1202-1204
CODEN: RCBUAU; ISSN: 0034-7752
PB SYSCOM 18 SRL
DT Journal
LA Romanian
AB Chrysin (5,7-dihydroxyflavone) is found especially in leaf buds and other plant products, but in significant quantities in beekeeping ones. The presence of chrysin (5,7-dihydroxyflavone) was studied in leaf buds collected in spring from 13 tree and bush species. Methanolic exts. of the buds were analyzed by thin-layer chromatog. (TLC) and HPLC-MS. TLC indicated chrysin presence in 4 species (*Alnus glutinosa*, *A. incana*, *Betula pendula*, *Populus nigra*). The HPLC-MS method with higher selectivity and specificity indicate the chrysin only in the leaf buds of black poplar (*Populus nigra*). The TLC results on chrysin presence may be affected by interferences from related compds. with similar R_f values and fluorescence behavior. In addition to chrysin, the TLC indicated the presence of quercetin, apigenin, luteolin, and caffeic acid in some species.

L3 ANSWER 11 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 2006:139823 CABA
DN 20063066339
TI Composition of tannins used in winemaking
Presenti sul mercato in varie forme composizione dei tannini impiegati in enologia
AU Citron, G. giacomo.citron@tebaldi.it
SO Informatore Agrario, (2006) Vol. 62, No. 13, pp. 51-54.
Publisher: Edizioni l'Informatore Agrario Srl. Verona
ISSN: 0020-0689
URL: www.informatoreagrario.it
CY Italy
DT Journal
LA Italian
ED Entered STN: 6 Sep 2006
Last Updated on STN: 6 Sep 2006
AB Tannin properties, which make them useful for industries, particularly beverage production, and Italian and EU regulations on use of tannins are considered. Chemical classification of tannins into hydrolysable and condensed or non-hydrolysable tannin groups is outlined. Data are tabulated on tannin content in lettuce, celery, fresh parsley, fresh peach, fresh apple, fresh pear, fresh cherry, fresh strawberry, coffee powder, green leaf tea, black leaf tea and cocoa powder. Data are also included on tannin content in *Quercus robur*, *Q. petraea*, *Q. alba* and *Castanea sativa*. Molecular structures of gallic and ellagic hydrolysable, and catechic and proanthocyanide condensed tannins are illustrated. Use of tannin extracts in industries, particularly for production of red wines and white wines manufactured for technical purposes is considered.

L3 ANSWER 12 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5
AN 2005:954117 CAPLUS
TI Cosmetic composition comprising an extract of the leaves of *castanea sativa*
IN Henry, Florence; Danoux, Louis; Pauly, Gilles
PA Cognis France S.A.S., Fr.

SO PCT Int. Appl.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005079741	A1	20050901	WO 2005-EP1105	20050204
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1765266	A1	20070328	EP 2005-707184	20050204
	R: DE, ES, FR, GB, IT				
	JP 2007522161	T	20070809	JP 2006-552511	20050204
	US 2007237847	A1	20071011	US 2007-597964	20070116
PRAI	EP 2004-290388	A	20040213		
	WO 2005-EP1105	W	20050204		

AB The present invention is concerned with a composition comprising an extract of the leaves of the plant *Castanea sativa*. It is further concerned with the use of this extract for the manufacture of a cosmetic composition and with the use of this extract for the cosmetic treatment of the human body.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 74 WPIDS COPYRIGHT 2008 THE THOMSON CORP on STN
 AN 2005-132663 [14] WPIDS
 DNC C2005-043788 [14]
 TI Producing a plant secondary metabolite of interest comprises including within the suspension culture an amount of adsorbent and one or more elicitor agents suitable to increase production of the secondary metabolite.
 DC C06; D16
 IN FRANCO C M M; ZHANG W
 PA (ALBR-C) ALBRIGHT & WILSON AUSTRALIA; (CSIR-C) COMMONWEALTH SCI & IND RES ORG; (TRID-N) TRIDAN LTD; (UYSA-N) UNIV FLINDERS SOUTH AUSTRALIA; (UYME-C) UNIV MELBOURNE
 CYC 106
 PIA WO 2005012507 A1 20050210 (200514)* EN 104[21]
 ADT WO 2005012507 A1 WO 2004-AU991 20040723
 PRAI AU 2003-903909 20030725
 AN 2005-132663 [14] WPIDS
 AB WO 2005012507 A1 UPAB: 20050708

NOVELTY - Producing a plant secondary metabolite of interest comprises including within the suspension culture an amount of adsorbent and one or more elicitor agents suitable to increase production of the secondary metabolite.

DETAILED DESCRIPTION - The method comprises:

(a) cultivating by suspension culture in a suitable nutrient medium plant cells that produce the secondary metabolite;

(b) including within the suspension culture an amount of adsorbent and one or more elicitor agents suitable to increase production of the secondary metabolite; and recovering the secondary metabolite from the

suspension culture.

INDEPENDENT CLAIMS are also included for:

- (1) a secondary metabolite product produced by the;
- (2) a method of producing a stilbene plant secondary metabolite of interest comprising cultivating by suspension culture in a suitable nutrient medium plant cells that produce a stilbene secondary metabolite; including within the suspension culture an amount of adsorbent and one or more elicitor agents suitable to increase production of the stilbene; and recovering the stilbene from the suspension culture; and
- (3) a stilbene plant secondary metabolite produced by the method.

USE - The method comprises producing secondary plant metabolites (claimed) using adsorption and elicitation in cell suspension culture.

L3 ANSWER 14 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 2006:84012 CABA
DN 20063062253
TI Effect of fertilizing and pruning on chestnut litter production and nutrient release
AU Pires, A. L.; Oliveira, A.; Joao, F.; Ribeiro, C.; Abreu, C. G. [EDITOR]; Rosa, E. [EDITOR]; Monteiro, A. A. [EDITOR]
CS Department of Edafologia, Universidade de Tras-os-Montes e Alto Douro, Qta de Prados, Apartado 1013, 5000-911 Vila Real, Portugal. alpires@utad.pt
SO Acta Horticulturae, (2005) No. 693, pp. 671-676. 9 ref.
Publisher: International Society for Horticultural Science (ISHS). Leuven
Price: Journal article; Conference paper ; 144 EURO.
Meeting Info.: Proceedings of the Third International Chestnut Congress, Chaves, Portugal, 20-23 October, 2004.
ISSN: 0567-7572; ISBN: 90-6605-100-0
URL: <http://www.actahort.org>
CY Belgium
DT Journal
LA English
ED Entered STN: 3 May 2006
Last Updated on STN: 3 May 2006
AB A 49-year-old chestnut (*Castanea sativa*) grove was studied from 1992 to 1999 in Portugal to determine the effect of changing management practices on chestnut yield, litter production and nutrient release by litter components. From April 1992 to March 1996, the chestnut grove was only tilled 3 times per year, while from April 1996 to March 1999, it was fertilized, pruned and tilled 4 times per year. Management intensification increased total litter from an average of 4 Mg ha⁻¹ to 5 Mg ha⁻¹ due to an increase in leaves, burs and fruits. The biggest effect was in nut production which, on average, increased from 0.9 to 1.6 Mg ha⁻¹ of dry matter. As before the changes in management, leaves were the main litter component and the largest amount of nutrients released by the trees was in fallen leaves. In the 1996/99 period, fertilization increased leaf nutrient concentration. This, together with the bigger amount of leaves produced in this period, resulted in a higher nutrient return to the soil. When the nutrient output due to removal of pruned biomass was considered, only the Ca, Mg and S litter balances were positive. However, the small amounts of fertilizers applied were appropriate to minimize the higher outputs. Results from soil samples collected in 1993 and 1999 showed higher exchangeable Ca, Mg, K, and extractable P in 1999 than in 1993 and similar soil organic matter levels.

L3 ANSWER 15 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 6
AN 2006:90074 CABA
DN 20063044133
TI *Castanea sativa* Mill. leaves as new sources of natural antioxidant: an electronic spin resonance study
AU Calliste, C. A.; Trouillas, P.; Allais, D. P.; Duroux, J. L.

CS Laboratoire de Biophysique, Faculte de Pharmacie, UPRES EA 1085,
Biomolécules et Cibles Cellulaires Tumorales, 2 rue du Dr. Marcland, 87025
Limoges Cedex, France.

SO Journal of Agricultural and Food Chemistry, (2005) Vol. 53, No. 2, pp.
282-288.
Publisher: American Chemical Society. Washington
ISSN: 0021-8561
URL: <http://pubs.acs.org/cgi-bin/abstract.cgi/jafcau/2005/53/i02/abs/jf049341c.html>
DOI: 10.1021/jf049341c

CY United States

DT Journal

LA English

ED Entered STN: 2 Jun 2006
Last Updated on STN: 2 Jun 2006

AB The antioxidant potential of sweet chestnut (*Castanea sativa*) was explored as a new source of active extracts. The capacity of the different fractions issued from aqueous, methanol, and ethyl acetate extracts to inhibit the stable free radical 2,2-diphenyl-1-picryl-hydrazyl, superoxide anion, and hydroxyl radical was measured by electronic spin resonance. Their scavenging potential was analysed versus their amount of phenolic compounds. Among the active fractions, the most effective one was A6, an ethyl acetate fraction, which contained a high level of total phenolic compounds (29.1 g/100 g). Thus, a different extraction procedure was performed to concentrate the active compounds of A6 in the new *C. sativa* leaf extract (CSLE). Compared to reference antioxidants (quercetin and vitamin E) and standard extracts (Pycnogenol, from French *Pinus maritima* [*P. pinaster*] bark, and grape marc extract), it was observed that A6 and CSLE have high antioxidant potentials, equivalent to at least those of reference compounds.

L3 ANSWER 16 OF 74 Elsevier BIOBASE COPYRIGHT 2008 Elsevier Science B.V.
on STN

AN 2005241131 ESBIODASE

TI Isolation of chestnut chloroplasts: Membrane potentials of chestnut and spinach thylakoids

AU Gomes-Laranjo J.; Salgado P.; Wong Fong Sang H.W.; Kraayenhof R.; Torres-Pereira J.

CS J. Gomes-Laranjo, Centre for Technological Studies on Environment and Life, University of Trás-os-Montes and Alto Douro, 5001-911 Vila Real, Portugal.
E-mail: jlaranjo@utad.pt

SO Photosynthetica, (2005), 43/2 (237-246), 41 reference(s)
CODEN: PHSYB5 ISSN: 0300-3604

DT Journal; Article

CY Netherlands

LA English

SL English

AB Typical chestnut thylakoid extracts isolated by mechanical disruption of leaf tissues had an equivalent of 0.28 kg m.sup.-.sup.3 chlorophyll (Chl) which is six times less than in thylakoids obtained from spinach, although Chl content in leaves was only half as small. According to optical microscopy, the vesicles showed a good integrity, exhibiting at 21°C a high capacity of photon-induced potential membrane generation, which was demonstrated by the almost full 9-amino-6-chloro-2-methoxyacridine fluorescence quenching in a hyper-saline medium containing 150 mM KCl and having osmotic potential of -1.5 MPa. The half-time of the thylakoid potential generation was 11.7 s with the time of dissipation around 8.9 s. In such conditions, spinach thylakoids showed an increased swelling and also

differences in the half-time generation which was almost four times faster than was observed in chestnut. However, when spinach thylakoids were incubated in a typical hypo-saline medium without KCl with osmotic potential -0.8 MPa, no additional swelling was observed. Consequently the half-time of potential dissipation was 35 s. Studies with nigericin suggested a chestnut thylakoid ApH significantly smaller than that observed in spinach, which was confirmed by the measurements of the ATP driven pumping activity.

L3 ANSWER 17 OF 74 USPATFULL on STN
AN 2004:239317 USPATFULL
TI Selective COX-2 inhibition from edible plant extracts
IN Obukowicz, Mark G., Kirkwood, MO, UNITED STATES
Hummert, Susan L., St. Ann, MO, UNITED STATES
PA Pharmacia Corporation (U.S. corporation)
PI US 2004185122 A1 20040923
AI US 2004-817014 A1 20040402 (10)
RLI Continuation of Ser. No. US 2000-737892, filed on 15 Dec 2000, PENDING
Continuation-in-part of Ser. No. US 1999-272363, filed on 19 Mar 1999,
ABANDONED
DT Utility
FS APPLICATION
LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR,
ST LOUIS, MO, 63102
CLMN Number of Claims: 93
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 1914

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed toward a method for inhibiting COX-2 in an organism. In particular, the method is preferably directed toward selectively inhibiting COX-2 in an organism. The method comprises the step of administering to the organism an organic extract isolated from an edible plant wherein such extract inhibits COX-2. A method to purify a composition that exhibits COX-2 inhibition and COX-2 selective inhibition from the organic extract is also provided. In addition, a method for treating and/or preventing COX-2 mediated inflammation or inflammation-associated disorders in an organism is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 74 USPATFULL on STN
AN 2004:69643 USPATFULL
TI Selective cox-2 inhibition from edible plant extracts
IN Obukowicz, Mark G., Kirkwood, MO, UNITED STATES
Hummert, Susan L., Overland, MO, UNITED STATES
PI US 2004052870 A1 20040318
AI US 2003-450596 A1 20030930 (10)
WO 2001-US48912 20011213
PRAI US 2000-9737892 20001215
DT Utility
FS APPLICATION
LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR,
ST LOUIS, MO, 63102
CLMN Number of Claims: 93
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 1893

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed toward a method for inhibiting COX-2 in an organism. In particular, the method is preferably directed toward selectively inhibiting COX-2 in an organism. The method comprises the

step of administering to the organism an organic extract isolated from an edible plant wherein such extract inhibits COX-2 A method to purify a composition that exhibits COX-2 inhibition and COX-2 selective inhibition from the organic extract is also provided. In addition, a method for treating and/or preventing COX-2 mediated inflammation or inflammation-associated disorders in an organism is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 74 WPIDS COPYRIGHT 2008 THE THOMSON CORP on STN
AN 2004-555423 [54] WPIDS
DNC C2004-203288 [54]
TI New extracts of *Castanea sativa* buds, are stimulants of extracellular matrix component synthesis by dermal cells and cytoprotectants for the skin, useful in cosmetic compositions
DC B04; D21
IN DEMARNE F; PEYROT E; PRESLE S
PA (GATT-N) GATTEFOSSE SA
CYC 104
PIA FR 2850273 A1 20040730 (200454)* FR 11[0]
WO 2004075873 A1 20040910 (200459) FR
AU 2003302211 A1 20040917 (200501) EN
ADT FR 2850273 A1 FR 2003-845 20030127; AU 2003302211 A1 AU 2003-302211 20031230; WO 2004075873 A1 WO 2003-FR50217 20031230
FDT AU 2003302211 A1 Based on WO 2004075873 A
PRAI FR 2003-845 20030127
AN 2004-555423 [54] WPIDS
AB FR 2850273 A1 UPAB: 20050907
NOVELTY - New extracts (A) of *Castanea sativa* (sweet chestnut) buds are obtained by (i) solid-liquid extraction, (ii) solid-liquid separation and (iii) recovery of the liquid phase.
ACTIVITY - Dermatological.
MECHANISM OF ACTION - Cell control agent.
USE - (A) is used for stimulating the synthesis of essential components of extracellular matrix by dermal cells and for cytoprotection in the skin (all claimed). The extracellular matrix components are e.g. elastin, collagen and hyaluronic acid. Cosmetic compositions containing (A) are also claimed.

L3 ANSWER 20 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 7
AN 2005:40886 CABA
DN 20053018590
TI Determination of 21 organochlorine pesticides in tree leaves using solid-phase extraction clean-up cartridges
AU Barriada-Pereira, M.; Gonzalez-Castro, M. J.; Muniategui-Lorenzo, S.; Lopez-Mahia, P.; Prada-Rodriguez, D.; Fernandez-Fernandez, E.
CS University Institute of Environment, Department of Analytical Chemistry, University of A Coruna, Campus da Zapateira s/n, E-15071 A Coruna, Spain. smuniat@udc.es
SO Journal of Chromatography, A, (2004) Vol. 1061, No. 2, pp. 133-139. Publisher: Elsevier Science Publishers B.V. Physical Sciences and Engineering Division. Amsterdam
ISSN: 0021-9673
URL: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TG8-4DW8Y2P-3&_user=10&_handle=B-WA-A-W-AY-MsSAYVA-UUW-AAUEEEEWCD-AAUDCYUUCD-YEZDAEWZE-AY-U&_fmt=summary&_coverDate=12%2F24%2F2004&_rdoc=3&_orig=browse&_srch=%23toc%235248%232004%23989389997%23535184!&_cdi=5248&view=c&_acct=C00050221&_version=1&_urlVersion=0&_userid=10&md5=21ccdelcb0d9c311b3c86bc68db38653
CY Netherlands Antilles
DT Journal
LA English

ED Entered STN: 4 Mar 2005
 Last Updated on STN: 4 Mar 2005

AB A method to determine 21 organochlorine pesticides (OCPs) in tree leaves [chestnut (*Castanea sativa*), hazel (*Corylus avellana*), oak (*Quercus robur*) and walnut tree (*Juglans regia*)] based on microwave-assisted extraction (MAE) followed by solid-phase extraction (SPE) clean-up is described. After extraction with hexane:acetone (50:50), four different sorbents (Florisil(R), tandem Florisil(R)+alumina, silica and ENVITM-Carb) were assayed for the clean-up step. Pesticides were eluted with 5 mL of hexane:ethyl acetate (80:20) and determined by gas chromatography and electron capture detection (GC-ECD). Carbon was the sorbent, which provided colourless eluates and chromatograms with less interferent compounds. Analytical recoveries obtained were ca. 100% for all the studied pesticides with this sorbent.

L3 ANSWER 21 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 8
 AN 2004:63522 CABA
 DN 20043037348
 TI Stomatal conductance and root-to-shoot signalling in chestnut saplings exposed to *Phytophthora cinnamomi* or partial soil drying
 AU Maurel, M.; Robin, C.; Simonneau, T.; Loustau, D.; Dreyer, E.; Desprez-Loustau, M. L.
 CS UMR-INRA-Universite Bordeaux 1 BIOGECO, Equipe de Pathologie Forestiere, Centre INRA de Bordeaux, Domaine de la Grande-Ferrade, BP81, 33883 Villenave d'Ornon Cedex, France. loustau@bordeaux.inra.fr
 SO Functional Plant Biology, (2004) Vol. 31, No. 1, pp. 41-51. many ref. Publisher: CSIRO Publishing. Collingwood
 ISSN: 1445-4408
 CY Australia
 DT Journal
 LA English
 ED Entered STN: 2 Apr 2004
 Last Updated on STN: 2 Apr 2004

AB The effects of root infection by *Phytophthora cinnamomi* on stomatal conductance in *Castanea sativa* L. saplings were investigated to determine the potential role of root-derived chemical signals. A split-root experiment was carried out, in which inoculation of the pathogen or drought was applied to the root systems in either one or both compartments. At the end of the experiment plant sap extracts were collected and their effects on stomatal conductance were determined by leaf bioassay. Inoculation or drought imposed in both compartments resulted in decreases in stomatal conductance (gs), transpiration rate, soil-to-leaf specific hydraulic conductance, leaf water potential, xylem [ABA] and root biomass, but not in the ratio of root-to-leaf mass in inoculated plants. Conversely, only gs and xylem [ABA] were affected in plants inoculated or droughted in one compartment, and no changes were detectable in leaf water potential and soil-to-leaf specific hydraulic conductance. The leaf bioassay showed that gs in chestnut was sensitive to ABA but not to *Phytophthora* elicitors. Stomatal conductance was reduced by some sap extracts, both from control and inoculated plants. Our results suggest the involvement of different signals, chemical and hydraulic, in regulating stomatal conductance of chestnut at different stages of stress.

L3 ANSWER 22 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2003:72464 CAPLUS
 TI Agent for the external treatment of pain and skin disorders
 IN Schilling, Johann Georg; Klett-Loch, Guenther; Klett-Loch, Lore
 PA Lore Klett-Loch Gdbr, Germany
 SO PCT Int. Appl.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003007972	A1	20030130	WO 2001-EP7805	20010707
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 2001279720	A1	20030303	AU 2001-279720	20010707
	WO 2003009860	A1	20030206	WO 2002-EP6912	20020622
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002325261	A1	20030217	AU 2002-325261	20020622
PRAI	WO 2001-EP7805	W	20010707		
	WO 2002-EP6912	W	20020622		

AB The invention relates to agents for the external treatment of myalgia, arthralgia, dermalgia and/or neuralgia, which contain the pulverized or crushed parts of the whole fruit or of an extract of parts of the whole fruit of a sweet chestnut. The pharmacol. effects are increased with the addition of pulverized or crushed comfrey roots and/or leaves or of an extract of comfrey roots and leaves or walnut leaves. The inventive agent is particularly effective in treating neurodermatitis, ischialgias, rheumatism and sprains. Said agent is also successfully used for the treatment of psoriasis, acne, cracked skin, dry skin, skin irritations or seborrheic scalp and skin disorders and for the prevention or treatment of sunburn.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 23 OF 74 CROPU COPYRIGHT 2008 THE THOMSON CORP on STN
AN 2003-81926 CROPU I S
TI Fipronil metabolism and dissipation in a simplified aquatic ecosystem.
AU Aajoud Al Ravanel P; Tissut M
CS Univ.Joseph-Fourier-Grenoble
LO Grenoble, Fr.
SO J.Agric.Food Chem. (51, No. 5, 1347-52, 2003)
CODEN: JAFCAU
DT Journal
LA English
FA AB; LA; CT
AN 2003-81926 CROPU I S
AB In simulated ecosystem trials, leaves of *Alnus incana*, *Salix cinerea*, *Tilia sylvatica*, *Carpinus betula*, *Quercus pedunculata*, and *Castanea vulgaris* collected from lake sediment and fragmented in a blender, were treated with carbon-labeled fipronil (14C; 0.43 uM). Extracts from the ecosystem were fractionated and

analyzed using TLC and GLC methods. In bioassays, 4th instar *Aedes aegypti* larvae were exposed to aqueous solutions of fipronil, fipronil derivatives, or extracts obtained from the aquatic ecosystem. Results indicated that fipronil readily transferred from the water solution to organic matter, and evolved to give 2 metabolites (reduced or oxidized in the side chain on the 4-position). The 2 metabolites were identified as fipronil-sulfide (4-CF₃-S-R) and fipronil-sulfone (4-CF₃-SO₂-R). In the bioassay, the fipronil LD₅₀ value was 24.8 nM after 24 h and 15.1 nM after 48 h.

ABEX After 3 months incubation in the ecosystem, insecticidal potential had increased by 175%, with most of this potential associated with the solid matrix. LD₅₀ values for known derivatives of fipronil after 24 h were 8.8 nM (fipronil-sulfure and fipronil-sulfone), 62.7 nM (desthiofipronil), and 121.6 nM (fipronil-amide). It was suggested that an increase in insecticidal activity was due to the presence of fipronil-sulfure, and to a lesser extent fipronil-sulfone. The light-dependent formation of desthiofipronil and biological formation of fipronil-amide lowered insecticidal activity.

L3 ANSWER 24 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 9

AN 2003:89980 CABA

DN 20033060127

TI Decomposition of sun and shade leaves from three deciduous tree species, as affected by their chemical composition

AU Sariyildiz, T.; Anderson, J. M.

CS Artvin Orman Fakultesi, Kars Kafkas Universitesi, 08000 Artvin, Turkey. t_sariyildiz@yahoo.com

SO Biology and Fertility of Soils, (2003) Vol. 37, No. 3, pp. 137-146. 31 ref.

Publisher: Springer-Verlag. Berlin

ISSN: 0178-2762

CY Germany, Federal Republic of

DT Journal

LA English

ED Entered STN: 6 Jun 2003

Last Updated on STN: 6 Jun 2003

AB Freshly fallen leaf litter from sweet chestnut

(*Castanea sativa* Mill), oak (*Quercus robur* L.) and beech (*Fagus sylvatica* L.) trees were classified into sun, intermediate and shade leaf types and analysed for N, acid detergent fibre, holocellulose, and lignin. In addition, the sugar constituents of structural polysaccharides (mainly from hemicelluloses) were determined after trifluoroacetic acid (TFA) hydrolysis, and the phenylpropanoid (PPD) derivatives of lignin after alkaline CuO oxidation. The litters were decomposed in laboratory microcosms for 2 years. Decomposition rates were initially rapid and then plateaued, but differences in mass losses for the leaf litter categories, and between the three species, were significant at 6, 12, 18 and 24 months. Mean mass losses after 24 months were 49.6% for chestnut, 40.4% for oak and 26.3% for beech. Mean losses for chestnut, oak and beech litter categories were 48.6%, 38.2% and 24.6%, respectively, for sun leaves, and 51.0%, 44.5% and 28.5%, respectively, for shade leaves. Initial lignin concentrations showed a negative correlation with mass losses over the first 6 months but initial acid detergent fibre was a better predictor of decomposition rates after 24 months. Within species, however, total extractable sugars and PPD concentrations reflected differences in decomposition rates between the different categories of leaf types. The analysis for specific carbohydrates and lignin derivatives improved the resolution of litter quality characterisation but did not explain the observed patterns of decomposition in long-term laboratory incubations. It is suggested that these may be affected by influence of the culture conditions on the composition of fungal communities.

L3 ANSWER 25 OF 74 IFIPAT COPYRIGHT 2008 IFI on STN
 AN 10188320 IFIPAT;IFIUDB;IFICDB
 TI ELICITED PLANT PRODUCTS; LIVING PLANTS OR PARTS ARE CONTACTED WITH ACETIC
 ACID TO INITIATE OR INCREASE PRODUCTION OF A COMPOUND
 INF Poulev; Alexander, Highland Park, NJ, US
 Raskin; Ilya, Manalapan, NJ, US
 IN Poulev Alexander; Raskin Ilya
 PAF Unassigned
 PA Unassigned Or Assigned To Individual (68000)
 PPA Rutgers State Univ of (Probable)
 AG MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER, CHICAGO,
 IL, 60606-6357 US
 PI US 2002132021 A1 20020919
 AI US 2001-929328 20010813
 RLI US 1998-67836 19980428 CONTINUATION-IN-PART ABANDONED
 US 1998-203772 19980623 CONTINUATION-IN-PART ABANDONED
 US 1998-130185 19980806 CONTINUATION-IN-PART ABANDONED
 PRAI US 1997-45220P 19970430 (Provisional)
 US 1997-50441P 19970627 (Provisional)
 FI US 2002132021 20020919
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 OS CA 140:6511
 ED Entered STN: 23 Sep 2002
 Last Updated on STN: 30 Jun 2003
 PARN This application claims priority to U.S. patent. application Ser. No.
 09/130,185, filed Aug. 6, 1998, and U.S. patent application Ser. No.
 09/203,772, filed Jun. 23, 1998, which is a continuation-in-part
 application of U.S. patent application Ser. No. 09/067,836, filed Apr.
 28, 1998, which claims priority to U.S. Provisional Application Nos.
 60/045,220 and 60/050,441, filed on Apr. 30, 1997 and Jun. 27, 1997,
 respectively. Each of the above-mentioned provisional and nonprovisional
 U.S. patent applications are herein expressly incorporated by reference.
 CLMN 26
 GI 31 Figure(s).
 FIG. 1 is a graphical presentation of the amount of daidzein recovered
 from root exudates produced by soybean plants treated with different
 elicitors in accordance with an embodiment of the invention.
 FIG. 2 is a graphical presentation of the amount of genistein recovered
 from root exudates produced by soybean plants treated with different
 elicitors in accordance with an embodiment of the invention.
 FIG. 3 is an HPLC profile of the diversity of compounds recovered from
 root exudates of various plants in accordance with an embodiment of the
 invention.
 FIG. 4 is an HPLC profile of the diversity of compounds recovered from
 Lupinus luteus in accordance with an embodiment of the invention.
 FIG. 5 is an HPLC profile of the diversity of compounds recovered from
 root exudates of Brassica juncea in accordance with an embodiment of the
 invention.
 FIG. 6 is an HPLC profile of the diversity of compounds recovered from
 root exudates of Datura metel in accordance with an embodiment of the
 invention.
 FIG. 7 is an HPLC profile of the diversity of compounds recovered from
 root exudates of Lupinus polyphyllus in accordance with an embodiment of
 the invention.
 FIG. 8 is an HPLC profile of the diversity of compounds recovered from
 root exudates of Melilotus medicaginoides in accordance with an
 embodiment of the invention.
 FIG. 9 is an HPLC profile of the diversity of compounds recovered from
 Solanum melongena without treating with an elicitor.

FIG. 10 is an FPLC profile of the diversity of compounds recovered from root extracts from *Solanum melongena* which was treated with an elicitor.

FIG. 11 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with an elicitor.

FIG. 12 is an HPLC profile of the diversity of compounds recovered from *Glycyne max* which was treated with elicitors, as compared to a control.

FIG. 13 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with elicitors, as compared to a control.

FIG. 14 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with elicitors, as compared to a control.

FIG. 15 is an HPLC profile of the diversity of compounds recovered from *Lycopersicon esculentum* which was treated with elicitors, as compared to a control.

FIG. 16 is an HPLC profile of the diversity of compounds recovered from *Lupinus polyphyllus* which was treated with elicitors, as compared to a control.

FIG. 17 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Laurus nobilis* (1881) against *Escherichia coli*.

FIG. 18 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Gentiana tibetica* (1881) against *Escherichia coli*.

FIG. 19 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Aconitum napellus* (1881) against *Escherichia coli*.

FIG. 20 is a representation of an agar plate showing antimicrobial activity of the leaf surface compounds (identified on the Figure as samples) of *Erythrina christagalli* (1363) against *Staphylococcus aureus*.

FIG. 21 is a representation of an agar plate showing antimicrobial activity of the leaf surface compounds (identified on the Figure as samples) of *Laurus nobilis* (1513) against *Staphylococcus aureus*.

FIG. 22 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Scutellaria altissima* (1671) against *Staphylococcus aureus*.

FIG. 23 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Scutellaria cretica* (1691) against *Staphylococcus aureus*.

FIG. 24 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Hosta fortunei* (1645) against *Saccharomyces cerevisiae*.

FIG. 25 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Cunninghamia lanceolata* (2489) against *Aspergillus flavus*.

FIG. 26 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds (identified on the Figure as samples) from leaves of *Thymus citriodorus* "aureus" (59) and *Hydrocotyle asiatica* (32a) against *Staphylococcus aureus*.

FIG. 27 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds (identified on the Figure as samples) from leaves of *Betula pendula* (24) against *Staphylococcus aureus*.

FIG. 28 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Eucalyptus rudis* (229) against *Staphylococcus aureus*.

FIG. 29 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Eucalyptus rudis* (229) against *Saccharomyces cerevisiae*.

FIG. 30 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Oreopanax capitatus* (216) against *Staphylococcus aureus*.

FIG. 31 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Oreopanax capitatus* (216) against *Escherichia coli*.

AB Intact living plants or plant parts are contacted with water to extract from the plant or plant part exuded chemical compounds, with the extracted chemical compounds subsequently being recovered from the water. The plant is treated with an elicitor or inducer to initiate or increase production of a chemical compound. The roots may be harvested for recovery of the chemical compounds. Valuable substances exuded from or onto a plant surface, such as a plant cuticle or the root of a plant, can be identified as biologically active. Libraries of substances exuded or secreted from various plant species can be elicited or induced to produce one or more of such substances.

CLMN 26 31 Figure(s).

FIG. 1 is a graphical presentation of the amount of daidzein recovered from root exudates produced by soybean plants treated with different elicitors in accordance with an embodiment of the invention.

FIG. 2 is a graphical presentation of the amount of genistein recovered from root exudates produced by soybean plants treated with different elicitors in accordance with an embodiment of the invention.

FIG. 3 is an HPLC profile of the diversity of compounds recovered from root exudates of various plants in accordance with an embodiment of the invention.

FIG. 4 is an HPLC profile of the diversity of compounds recovered from *Lupinus luteus* in accordance with an embodiment of the invention.

FIG. 5 is an HPLC profile of the diversity of compounds recovered from root exudates of *Brassica juncea* in accordance with an embodiment of the invention.

FIG. 6 is an HPLC profile of the diversity of compounds recovered from root exudates of *Datura metel* in accordance with an embodiment of the invention.

FIG. 7 is an HPLC profile of the diversity of compounds recovered from root exudates of *Lupinus polyphyllus* in accordance with an embodiment of the invention.

FIG. 8 is an HPLC profile of the diversity of compounds recovered from root exudates of *Melilotus medicaginoides* in accordance with an embodiment of the invention.

FIG. 9 is an HPLC profile of the diversity of compounds recovered from *Solanum melongena* without treating with an elicitor.

FIG. 10 is an FPLC profile of the diversity of compounds recovered from root extracts from *Solanum melongena* which was treated with an elicitor.

FIG. 11 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with an elicitor.

FIG. 12 is an HPLC profile of the diversity of compounds recovered from *Glycyne max* which was treated with elicitors, as compared to a control.

FIG. 13 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with elicitors, as compared to a control.

FIG. 14 is an HPLC profile of the diversity of compounds recovered from *Daucus carota* which was treated with elicitors, as compared to a control.

FIG. 15 is an HPLC profile of the diversity of compounds recovered from *Lycopersicon esculentum* which was treated with elicitors, as compared to a control.

FIG. 16 is an HPLC profile of the diversity of compounds recovered from *Lupinus polyphyllus* which was treated with elicitors, as compared to a control.

FIG. 17 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Laurus nobilis* (1881) against *Escherichia coli*.

FIG. 18 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Gentiana tibetica* (1881) against *Escherichia coli*.

FIG. 19 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Aconitum napellus* (1881) against *Escherichia coli*.

FIG. 20 is a representation of an agar plate showing antimicrobial activity of the leaf surface compounds (identified on the Figure as samples) of *Erythrina christagalli* (1363) against *Staphylococcus aureus*.
 FIG. 21 is a representation of an agar plate showing antimicrobial activity of the leaf surface compounds (identified on the Figure as samples) of *Laurus nobilis* (1513) against *Staphylococcus aureus*.
 FIG. 22 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Scutellaria altissima* (1671) against *Staphylococcus aureus*.
 FIG. 23 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Scutellaria cretica* (1691) against *Staphylococcus aureus*.
 FIG. 24 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Hosta fortunei* (1645) against *Saccharomyces cerevisiae*.
 FIG. 25 is a representation of an agar plate showing antimicrobial activity of the root exudate of *Cunninghamia lanceolata* (2489) against *Aspergillus flavus*.
 FIG. 26 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds (identified on the Figure as samples) from leaves of *Thymus citriodorus* "aureus" (59) and *Hydrocotyle asiatica* (32a) against *Staphylococcus aureus*.
 FIG. 27 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds (identified on the Figure as samples) from leaves of *Betula pendula* (24) against *Staphylococcus aureus*.
 FIG. 28 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Eucalyptus rudis* (229) against *Staphylococcus aureus*.
 FIG. 29 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Eucalyptus rudis* (229) against *Saccharomyces cerevisiae*.
 FIG. 30 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Oreopanax capitatus* (216) against *Staphylococcus aureus*.
 FIG. 31 is a representation of an agar plate showing antimicrobial activity of leaf surface compounds of *Oreopanax capitatus* (216) against *Escherichia coli*.

L3 ANSWER 26 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 2003:82443 CABA

DN 20033021852

TI Genetic characterization of Southwest German sweet chestnuts (*Castanea sativa* Mill.) by use of molecular markers

Vom genetischen Fingerabdruck zum gesicherten Vermehrungsgut: Untersuchungen zur Erhaltung und nachhaltigen Nutzung forstlicher Genressourcen in Rheinland-Pfalz. [From genetic fingerprinting to known reproductive material: studies on the conservation and sustainable management of forest genetic resources in Rheinland-Palatinate.]

Die genetische Charakterisierung sudwestdeutscher Edelkastanien (*Castanea sativa* Mill.) mittels molekularer Marker

AU Schiffer, M.; Maurer, W. D.; Tabel, U.; Leibenguth, F.

CS bis 2000 Fachrichtung Genetik der Universität des Saarlandes, D-66041 Saarbrücken, Germany.

SO Mitteilungen aus der Forschungsanstalt für Waldökologie und Forstwirtschaft Rheinland-Pfalz, (2002) No. 49/02, pp. 184-198. 29 ref. Publisher: Forstliche Versuchsanstalt Rheinland-Pfalz. Trippstadt Price: Bulletin article . ISSN: 0936-6707

CY Germany, Federal Republic of

DT Journal

LA German

SL English

ED Entered STN: 6 Jun 2003
 Last Updated on STN: 6 Jun 2003

AB Four provenances of sweet chestnut (*Castanea sativa*) originating from Southwest Germany and comprising 160 young trees were analysed by using two types of molecular markers in order to determine the extent of genetic variability within the provenances and the degree of differentiation among them. DNA extracted from mature leaves was amplified by using two 10-base-primers via polymerase chain reaction (PCR). In this way reproducible random amplified polymorphic DNA (RAPD) banding patterns were generated after electrophoretic separation. After transferring the PCR products on PVDF membranes by the Southern blotting method and hybridization by the digoxigenin-labeled probe (GTG)₅, new markers were produced (denominated "Random Amplified Microsatellite Polymorphisms" (RAMPO)). The RAPD and RAMPO profiles of all trees were compared pair-wise with each other bringing about similarity indices which served as a measure for both the variability inherent to the provenances tested and also for the genetic dissimilarity between them. The results obtained by the two primers were found to be almost identical for all provenances tested. High RAPD similarities (0.70-0.84) faced only slightly slower RAMPO values. The similarity indices between the provenances were found to be barely slower resulting consequently in only insignificant genetic distances (for RAPD 0,035 and for RAMPO 0,031). It is concluded that the four tested provenances (and probably all south-west German sweet chestnuts) belong to the very same basic population. This assumption is supported by a screening using 20 different primers: neither the RAPD nor the RAMPO markers tested were found to be of particular provenance specificity. Since these results coincide with isozyme data of different European populations, it may be assumed that sweet chestnut was exposed to genetic impoverishing during its migration from its East Turkey glacial refugium into the West Mediterranean regions, this reduction in variability did not further increase, however, during its spreading in Germany.

L3 ANSWER 27 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 10
 AN 2002:163048 CABA
 DN 20023104611
 TI American chestnut as an allelopath in the southern Appalachians
 AU Vandermast, D. B.; Lear, D. H. van; Clinton, B. D.; van Lear, D. H.
 CS Department of Biology, University of North Carolina, Chapel Hill, NC 27514, USA. dvnlr@clemson.edu
 SO Forest Ecology and Management, (2002) Vol. 165, No. 1/3, pp. 173-181. 29 ref.
 Publisher: Elsevier Science B.V. Amsterdam
 ISSN: 0378-1127
 CY Netherlands Antilles
 DT Journal
 LA English
 ED Entered STN: 4 Oct 2002
 Last Updated on STN: 4 Oct 2002

AB Prior to the chestnut blight (*Cryphonectria parasitica*), American chestnut (*Castanea dentata* (Marsh.) Borkh.) was the most common overstory tree in eastern deciduous forests. Chestnut's dominance has often been attributed to its resistance to fire and subsequent propensity to sprout vigorously and grow rapidly. Its role as an allelopath has rarely been studied. Allelopathic qualities of chestnut leaves were tested with five native co-occurring tree species: red maple (*Acer rubrum*), sugar maple (*A. saccharum*), eastern white pine (*Pinus strobus*), eastern hemlock (*Tsuga canadensis*), yellow-poplar (*Liriodendron tulipifera*), a native shrub rosebay rhododendron (*Rhododendron maximum*), and a bioassay species lettuce (*Lactuca sativa* var. "black seeded Simpson"). For each species, six replicates of 100 seeds each were stratified for 90 days in

distilled water or chestnut leaf extract, then germinated for 21 days. Six additional replicates of red maple, eastern hemlock, yellow-poplar, and rhododendron were germinated without stratification. Lettuce seed was not stratified. When germination percentage peaked, seeds were removed from the experiment and radicle length was measured. Chestnut leaf extract lowered germination rates of extract-treated lettuce, stratified and unstratified eastern hemlock, and unstratified rhododendron seeds. Radicles of extract-treated lettuce and unstratified rhododendron were significantly shorter than radicles of water-treated seeds. In general, radicles of extract-treated seeds were thinner, broke more easily, and were less likely to have developed secondary roots than radicles of water-treated seeds. This study suggests leachate from American chestnut leaf litter could have suppressed germination and growth of competing shrub and tree species and that allelopathy was a mechanism whereby American chestnut may have controlled vegetative composition and dominated eastern forests. Current vegetative composition in southern Appalachian forests may be attributable, in part, to the disappearance of American chestnut as an allelopathic influence.

L3 ANSWER 28 OF 74 USPATFULL on STN
AN 2001:165454 USPATFULL
TI Selective COX-2 inhibition from edible plant extracts
IN Obukowicz, Mark G., St. Louis, MO, United States
Hummert, Susan L., St. Louis, MO, United States
PI US 2001024664 A1 20010927
AI US 2000-737892 A1 20001215 (9)
RLI Continuation-in-part of Ser. No. US 1999-272363, filed on 19 Mar 1999,
PENDING
DT Utility
FS APPLICATION
LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR,
ST LOUIS, MO, 63102
CLMN Number of Claims: 93
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 1923
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed toward a method for inhibiting COX-2
in an organism. In particular, the method is preferably directed toward
selectively inhibiting COX-2 in an organism. The method comprises the
step of administering to the organism an organic extract isolated from
an edible plant wherein such extract inhibits COX-2. A method to purify
a composition that exhibits COX-2 inhibition and COX-2 selective
inhibition from the organic extract is also provided. In addition, a
method for treating and/or preventing COX-2 mediated inflammation or
inflammation-associated disorders in an organism is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 29 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 11
AN 2000:112279 CABA
DN 20001913339
TI Chemical and biological processes leading to the neutralisation of acidity
in soil incubated with litter materials
AU Marschner, B.; Noble, A. D.
CS Ruhr Universitat Bochum, Institut fur Geographie, 44780 Bochum, Germany.
SO Soil Biology & Biochemistry, (2000) Vol. 32, No. 6, pp. 805-813. 32 ref.
ISSN: 0038-0717
DT Journal
LA English

ED Entered STN: 13 Sep 2000
Last Updated on STN: 13 Sep 2000
AB Plant materials containing high amounts of ash alkalinity can be utilized to increase the pH of acid soils but the chemical and biological processes involved in the release of this alkalinity are not fully understood. In this laboratory study fresh leaf litter from two tree species (*Melia azedarach*, and *Castanea sativa*) and sugarcane (*Saccharum officinarum*) trash containing ash alkalinities of 288, 141 and 33 mmolc/kg, respectively, were mixed at three different rates (4, 16, 32 mg/g) with acidic topsoil from a Ultic Palexeralf and incubated at 90% WHC and at 25[deg]C for 20 days while monitoring CO₂-evolution. Treatment effects were assessed by measuring changes in pH, acid buffering curves and exchangeable cations before and after incubation. Soluble organic compounds, mineral N-forms were determined in soil extracts. Immediately after mixing, up to 50% of the added alkalinity was available for acid neutralization. After incubation, acid neutralization capacity at pH 4 (ANC_{pH 4}) and the pH of the soils with the two higher amendment rates had increased in all treatments. The changes were most pronounced in the *Melia* amended soils, followed by *Castanea* and sugarcane and reflected the added amounts of ash alkalinity. In all treatments, soil respiration increased with amendment rate and was closely related to a decline in soluble organic carbon during incubation. Together with the shift from stronger to weaker acidity observed after incubation, this is evidence for the microbial decarboxylation of soluble organic anions.

L3 ANSWER 30 OF 74 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN
AN 2000:30081735 BIOTECHNO
TI Biotic and abiotic stress can induce cystatin expression in chestnut
AU Pernas M.; Sanchez-Monge R.; Salcedo G.
CS G. Salcedo, Unidad de Bioquímica, Departamento de Biotecnología, Ciudad Universitaria, 28040 Madrid, Spain.
SO FEBS Letters, (2000), 467/2-3 (206-210), 37 reference(s)
CODEN: FEBLAL ISSN: 0014-5793

PUI S0014579300011571

DT Journal; Article

CY Netherlands

LA English

SL English

AB A cysteine proteinase inhibitor (cystatin) from chestnut (*Castanea sativa*) seeds, designated CsC, has been previously characterized. Its antifungal, acaricide and inhibitory activities have allowed to involve CsC in defence mechanisms. The CsC transcription levels decreased during seed maturation and increased throughout germination, an opposite behavior to that shown by most phytocystatins. No inhibition of endogenous proteinase activity by purified CsC was found during the seed maturation or germination processes. CsC message accumulation was induced in chestnut leaves after fungal infection, as well as by wounding and jasmonic acid treatment. Induction in roots was also observed by the last two treatments. Furthermore, CsC transcript levels strongly raised, both in roots and leaves, when chestnut plantlets were subjected to cold- and saline-shocks, and also in roots by heat stress. All together, these data suggest that chestnut cystatin is not only involved in defence responses to pests and pathogen invasion, but also in those related to abiotic stress. Copyright (C) 2000 Federation of European Biochemical Societies.

L3 ANSWER 31 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12

AN 2000:531504 CAPLUS

DN 134:125564

TI Antibacterial and allelopathic activity of extract from *Castanea sativa* leaves

AU Basile, A.; Sorbo, S.; Giordano, S.; Ricciardi, L.; Ferrara, S.;
 CS Montesano, D.; Castaldo Cobianchi, R.; Vuotto, M. L.; Ferrara, L.
 via Foria 223, Dipartimento di Biologia Vegetale, Universita degli Studi
 di Napoli 'Federico II', Naples, 80139, Italy
 SO Fitoterapia (2000), 71(Suppl. 1), S110-S116
 CODEN: FTRPAE; ISSN: 0367-326X
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB Following the extraction of *Castanea sativa* with an aqueous solution of
 sulfuric acid
 (pH 3.0), the Et acetate soluble fraction was tested for its antibacterial
 and allelopathic activity. The extract was shown to have pronounced
 antibacterial effects against seven of the eight strains of Gram-pos. and
 Gram-neg. bacteria used (MIC in the range of 64-256 µg/mL and MBC in
 the range of 256-512 µg/mL). The active fraction was analyzed by TLC
 and HPLC showing the presence of rutin, hesperidin, quercetin, apigenin,
 morin, naringin, galangin and kaempferol. Stds. of the identified
 flavonoids were tested against the same bacterial strains. The highest
 activity was shown by quercetin, rutin and apigenin. The allelopathic
 effect was tested against *Raphanus sativus* seed germination. The extract,
 quercetin, rutin and apigenin caused a decrease in the percentage of seed
 germination and root and epicotyl growth.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 32 OF 74 Elsevier BIOBASE COPYRIGHT 2008 Elsevier Science B.V.
 on STN DUPLICATE

AN 2000182923 ESBIOBASE

TI Antibacterial and allelopathic activity of extract from
Castanea sativa leaves

AU Basile A.; Sorbo S.; Giordano S.; Ricciardi L.; Ferrara S.; Montesano D.;
 Castaldo Cobianchi R.; Vuotto M.L.; Ferrara L.

CS A. Basile, Dipartimento di Biologia Vegetale, Univ. Studi di Napoli
 'Federico II', via Foria 223, 80139 Naples, Italy.
 E-mail: adbasile@unina.it

SO Fitoterapia, (01 AUG 2000), 71/SUPPL. 1 (S110-S116), 35 reference(s)
 CODEN: FTRPAE ISSN: 0367-326X

PUI S0367326X00001854

DT Journal; Article

CY Netherlands

LA English

SL English

AB Following the extraction of *Castanea sativa*
 with an aqueous solution of sulfuric acid (pH 3.0), the ethyl acetate
 soluble fraction was tested for its antibacterial and allelopathic
 activity. The extract was shown to have pronounced
 antibacterial effects against seven of the eight strains of Gram-
 positive and Gram-negative bacteria used (MIC in the range of 64-256
 µg/ml and MBC in the range of 256-512 µg/ml). The active fraction
 was analyzed by TLC and HPLC showing the presence of rutin, hesperidin,
 quercetin, apigenin, morin, naringin, galangin and kaempferol. Standards
 of the identified flavonoids were tested against the same bacterial
 strains. The highest activity was shown by quercetin, rutin and apigenin.
 The allelopathic effect was tested against *Raphanus sativus* seed
 germination. The extract, quercetin, rutin and apigenin caused
 a decrease in the percentage of seed germination and root and epicotyl
 growth. (C) 2000 Elsevier Science B.V.

L3 ANSWER 33 OF 74 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
 reserved on STN DUPLICATE 14

AN 2000283249 EMBASE

TI Antibacterial and allelopathic activity of extract from
 Castanea sativa leaves.
 AU Basile A.; Sorbo S.; Giordano S.; Ricciardi L.; Ferrara S.; Montesano D.;
 Castaldo Cobianchi R.; Vuotto M.L.; Ferrara L.
 CS A. Basile, Dipartimento di Biologia Vegetale, Univ. Studi di Napoli
 'Federico II', via Foria 223, 80139 Naples, Italy. adbasile@unina.it
 SO Fitoterapia, (1 Aug 2000) Vol. 71, No. SUPPL. 1, pp. S110-S116.
 Refs: 35
 ISSN: 0367-326X CODEN: FTRPAE
 PUI S 0367-326X(00)00185-4
 CY Netherlands
 DT Journal; Article
 FS 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
 LA English
 SL English
 ED Entered STN: 21 Sep 2000
 Last Updated on STN: 21 Sep 2000
 AB Following the extraction of Castanea sativa with an aqueous solution of
 sulfuric acid (pH 3.0), the ethyl acetate soluble fraction was tested for
 its antibacterial and allelopathic activity. The extract was shown to
 have pronounced antibacterial effects against seven of the eight strains
 of Gram- positive and Gram-negative bacteria used (MIC in the range of
 64-256 µg/ml and MBC in the range of 256-512 µg/ml). The active
 fraction was analyzed by TLC and HPLC showing the presence of rutin,
 hesperidin, quercetin, apigenin, morin, naringin, galangin and kaempferol.
 Standards of the identified flavonoids were tested against the same
 bacterial strains. The highest activity was shown by quercetin, rutin and
 apigenin. The allelopathic effect was tested against Raphanus sativus
 seed germination. The extract, quercetin, rutin and apigenin caused a
 decrease in the percentage of seed germination and root and epicotyl
 growth. (C) 2000 Elsevier Science B.V.

L3 ANSWER 34 OF 74 CABA COPYRIGHT 2008 CABI on STN
 AN 1999:158577 CABA
 DN 19990612724
 TI Dynamics of leaf litter structural compounds in C. sativa and P. pinaster
 forest ecosystems during the decomposition process: interactions with soil
 organic matter and nutrient release
 AU Martins, A.; Azevedo, S.; Carvalho, L.; Salesses, G. [EDITOR]
 CS UTAD, Dep. Edafologia, Apart. 202, 5001 Vila Real codex, Portugal.
 SO Acta Horticulturae, (1999) No. 494, pp. 161-166. 11 ref.
 Price: Conference paper; Journal article .
 Meeting Info.: Proceedings of the Second International Symposium on
 Chestnut, Bordeaux, France, 19-23 October, 1998.
 ISSN: 0567-7572; ISBN: 90-6605-941-9
 DT Journal
 LA English
 ED Entered STN: 8 Dec 1999
 Last Updated on STN: 8 Dec 1999
 AB The decay rate and the relative amounts of non-polar extractable
 compounds (fats and waxes), alcohol and water soluble compounds (resins,
 tannins and simple sugars), acid soluble compounds (cellulose and
 hemicellulose) and Klason lignin, in leaf litter in stands of
 Pinus pinaster and Castanea sativa, were studied in
 northern Portugal. Leaves and needles were collected in stands
 in October 1994 and from January 1995 and placed in nylon mesh litterbags
 in the field. The decomposition process was followed for 18 months. The
 results indicated a clear difference between the 2 species in composition
 of leaf litter and in decay rate. C. sativa
 leaves had larger amounts of relatively easily decomposed

compounds (alcohol/water soluble compounds and hemicellulose), while *P. pinaster* needles had higher proportions of difficult-to-decompose compounds (fats and waxes, Klason lignin and cellulose). Higher amounts of the first group of compounds seemed to stimulate the litterfall decomposition process, which was shown by a higher decrease of lignin in *C. sativa* 200 days after the onset of decomposition. Thus, the annual decay rate (*k*) was much higher in *C. sativa* leaves, negatively related to C/N and lignin/N ratios and positively related to the EC/lignin ratio. *P. pinaster* produced low quality litterfall leading to low organic matter and nutrient rates in the forest floor, when compared to *C. sativa*.

L3 ANSWER 35 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 15
 AN 1999:3341 CABA
 DN 19980712367

TI Ameliorating acid soils with organic materials: effects of amendments derived from coal on yield and composition of young wheat plants grown on an acid red podzol

AU Noble, A. D.; Randall, P. J.

CS CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601, Australia.

SO Communications in Soil Science and Plant Analysis, (1998) Vol. 29, No. 19/20, pp. 3023-3043. 33 ref.
 ISSN: 0010-3624

DT Journal

LA English

ED Entered STN: 12 Jan 1999

Last Updated on STN: 12 Jan 1999

AB It has been suggested that Ca-saturated organic materials, produced by the oxidation of coal, may be of value as ameliorants for subsurface soil acidity. Two of them (OXPR, calcium-oxipproduct; and OXFU, calcium oxifulvate) were evaluated and compared with lime in pot studies with wheat (*Triticum aestivum*). In the first experiment, lime, OXPR and OXFU, each at four rates, were applied to an acid red podzolic soil, high in extractable aluminium (Al) and were compared for their ability to improve seedling root growth. In the second experiment, the three amendments were applied to the same soil, and shoot yields and mineral content were measured after five weeks growth. The three amendments raised soil pH, lowered extractable Al and increased root elongation. OXFU at the highest rate (25 t ha⁻¹) inhibited root growth, possibly due to the high concentration of solutes as indicated by high electrical conductivity of the soil solution. In the second experiment the three amendments improved shoot yields, with significant increases up to 0.8 t Ca ha⁻¹ application. Yields were in general higher with lime than with OXPR and OXFU at equivalent rates of added Ca. However, a significant asymptotic relationship was observed between yield and calcium carbonate (CaCO₃) equivalence of each of the applied amendments. Yield was highly correlated with measures of soil Al. Plant Mn concentrations were decreased by lime and OXPR and there were linear correlations between plant Mn concentration and soil Mn extractable in 0.01 M CaCl₂. With OXFU, which has a high concentration of water soluble Mn, plant Mn was decreased below the unamended controls only at the higher rates of application. Leaf tissue Zn concentrations were high in treatments receiving the two coal-derived amendments. In an effort to determine the role of ion complexation in the remediation process, a third study evaluating the Al complexing ability of the two coal derived products was compared to that of a water-soluble fraction extracted from chestnut (*Castanea sativa*) litter which is known to have a high affinity for Al. The two coal derived materials had considerably lower affinities for Al than the chestnut extract, supporting the hypothesis that complexing reactions were of minor importance in the observed responses.

L3 ANSWER 36 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 16

AN 1998:783150 CAPLUS

DN 130:109635

TI Method for the differentiation of leaf litter extracts and study of their interaction with Cu(II) by molecular fluorescence

AU Esteves da Silva, Joaquim C. G.; Machado, Adelio A. S. C.; Ferreira, Miguel A.; Rey, Francisco

CS Chemistry Department, Faculdade de Ciencias, LAQUIPAI, Oporto, P4150, Port.

SO Canadian Journal of Chemistry (1998), 76(8), 1197-1209

CODEN: CJCHAG; ISSN: 0008-4042

PB National Research Council of Canada

DT Journal

LA English

AB Six leaf litter exts. (LLE) (eucalyptus (*Eucalyptus globulus*), fern (*Pteridium aquilinum*), oak (*Quercus robur*), chestnut (*Castanea sativa*), laurel (*Laurus nobilis*), and ulex (*Ulex europaeus*) canopies) were isolated following an extraction procedure similar to that used for fulvic acids (FA) and were characterized by elemental anal. and UV-Vis, FT-IR, and synchronous mol. fluorescence (SyF) spectroscopies. Moreover, information about their interaction with the Cu(II) ion in aqueous solution (100 mg/L of LLE in 0.1 M KNO₃ at pH = 6) was obtained from the measurement of SyF spectra at increasing concns. of Cu(II). These spectral sets were treated by a self-modeling mixture anal. method (SIMPLISMA) to obtain improved quenching profiles to be used in the estimation by the method of Ryan and Weber of the conditional stability consts. (Kc), concentration of binding sites, and percentage of fluorescent binding sites accessible for complexation. For comparison purposes, two samples of FA extracted from two horizons of an oak forest soil (0-5 cm and 5-15 cm) were also studied. The spectroscopic data obtained for LLE and FA were different. Thus, LLE are characterized by relatively high concns. of individualized simple mols. and include reactive structures (alkene and protein residues). The ratio of aliphatic/aromatic structures was higher in LLE than for FA. Both LLE and soil FA from stable complexes with Cu(II), but the logarithm of the conditional stability constant of the 1:1 complexes is larger for LLE (about 5) than for the soil FA (about 4.5).

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 37 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 17

AN 1999:14939 CABA

DN 19990600261

TI Study of the acid-base properties of leaf litter extracts

AU Silva, J. C. G. E. da; Machado, A. A. S. C.; Ferreira, M. A.; Rey, F.; da Silva, J. C. G. E.

CS LAQUIPAI, Chemistry Department, Faculdade de Ciencias do Porto, R. Campo Alegre 687, P-4150 Porto, Portugal.

SO Fresenius' Journal of Analytical Chemistry, (1998) Vol. 361, No. 5, pp. 479-486. 25 ref.

ISSN: 0937-0633

DT Journal

LA English

ED Entered STN: 11 Feb 1999

Last Updated on STN: 11 Feb 1999

AB The acid-base properties of leaf litter extracts (LLE) of *Eucalyptus globulus*, *Pteridium aquilinum* (fern), *Quercus robur* (oak) and *Castanea sativa* (chestnut) cover, were characterized by synchronous fluorescence (SyF) spectroscopy and compared with those of two fulvic acids (FA) extracted from two different horizons (0-5 and 5-15 cm) of an oak forest soil. The characterization was based on the variation with the pH of the properties of the fluorescent

structures present in the samples, which function as probes and provide a macroscopic image of their acid-base properties. These sets of SyF spectra collected as a function of the pH show fingerprinting potential. They were treated by a self-modeling curve resolution procedure, evolving factor analysis with a gradient concentration window (EFA-GCW), to reduce the raw spectral data to the number of components, their spectra, and SyF intensity profiles (pH distribution diagrams). Four acid-base systems were detected for all samples of LLE and FA with pKas ranging from 2.5 to 10.0 (pKas about 3, 5, 7 and 9, except for the fern LLE sample which showed pKas about 5, 7, 9 and 10). A similarity analysis of the spectra of the components, performed by cluster analysis, showed that the most acidic fluorescent structures of the LLE are not similar to those of the soil FA, but the less acidic are.

L3 ANSWER 38 OF 74 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED.
on STN DUPLICATE 18

AN 1998-0255927 PASCAL

CP Copyright .COPYRGT. 1998 INIST-CNRS. All rights reserved.

TIEN Effect of virulent and hypovirulent *Cryphonectria parasitica* (Murr.) Barr on the intercellular pathogen related proteins and on total protein pattern of chestnut (*Castanea sativa* Mill.)

AU SCHAFLEITNER R.; WILHELM E.

CS Department of Life Sciences, Austrian Research Centre Seibersdorf, 2444 Seibersdorf, Austria

SO Physiological and molecular plant pathology, (1997), 51(5), 323-332, 38 refs.
ISSN: 0885-5765 CODEN: PMPPEZ

DT Journal

BL Analytic

CY United Kingdom

LA English

AV INIST-15356, 354000079211000040

CP Copyright .COPYRGT. 1998 INIST-CNRS. All rights reserved.

AB Chestnut blight disease is caused by virulent strains of *Cryphonectria parasitica*. Strains infected with virus have reduced virulence, i.e. are hypovirulent. Chestnut stems were inoculated with virulent and hypovirulent strains and proteins recovered from the intercellular fluid of both stems and leaves. Infection with a hypovirulent strain resulted in induction of more extracellular pathogen-related proteins (β -1,3-glucanase and chitinase), locally and systemically, than infection with a virulent strain. Seven days after inoculation with *C. parasitica*, two-dimensional gel electrophoresis revealed five proteins in total extracts of stems inoculated with virulent *C. parasitica*, and six other proteins in extracts from stems infected with hypovirulent *C. parasitica*. These results indicate that, besides the decreased virulence of the hypovirulent fungus, recognition and induction of defence mechanisms by the plant could be responsible for the survival of chestnut trees infected with hypovirulent strains.

L3 ANSWER 39 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 19

AN 96:46612 CABA

DN 19960703701

TI Phytotoxic effects of the high molecular weight fraction of an aqueous leaf litter extract on barley root development

AU Brunner, I.; Luster, J.; Ochs, M.; Blaser, P.

CS Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), CH-8903 Birmensdorf, Switzerland.

SO Plant and Soil, (1996) Vol. 178, No. 1, pp. 83-93. 42 ref.
ISSN: 0032-079X

DT Journal

LA English

ED Entered STN: 30 Apr 1996

Last Updated on STN: 30 Apr 1996

AB The root development of barley cv. Flica seedlings grown for one week in an aerated nutrient solution was studied in the presence of dissolved organic matter from an aqueous chestnut (*Castanea sativa*) leaf litter extract. In particular, the different effects of low and high MW fractions (small molecules: MW <1000; large molecules: >10 000) of the leaf litter extract were examined. In the presence of large molecules root growth was inhibited, an irregular root tip morphology was observed, and Ca and Mg concentrations in the shoots were lower than in control plants. These phytotoxic effects were not caused by the formation of an impermeable layer of large molecules on the root surfaces that lower accessibility for nutrient cations as inferred from voltammetric experiments. A germination assay using spruce [*Picea abies*] seeds, however, indicated allelochemical effects of large molecules, which exhibit a higher aromaticity than the small molecules as indicated by spectroscopic characterization. In the growth experiments with small molecules, no influence on the root development of barley was evident, but an increase of Ca and Mg in the shoots was detected. During these growth experiments, a large amount of the small molecules, mainly simple phenols and amino acids, disappeared from the nutrient solution. The loss of small molecules was most likely the effect of mineralization.

L3 ANSWER 40 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 20

AN 96:53971 CABA

DN 19961901963

TI Conductimetric analysis of the ion binding properties of three leaf extracts of chestnut (*Castanea sativa*), eucalyptus (*Eucalyptus globulus*) and oak (*Quercus robur*)

AU Rey, F.; Perez-Asenjo, M.; Machado, A. A. S. C.; Facal, P.; Ferreira, M. A.; Toja, A.

CS Area de Quimica Fisica, Universidad de Vigo, Torrecedeira 86, Vigo, Spain.

SO Talanta (Oxford), (1995) Vol. 42, No. 12, pp. 1919-1923. 27 ref.

ISSN: 0039-9140

DT Journal

LA English

ED Entered STN: 30 Apr 1996

Last Updated on STN: 30 Apr 1996

AB Humic materials extracted from leaves of chestnut (*Castanea sativa*), eucalyptus (*Eucalyptus globulus*) and oak (*Quercus robur*), common in the forests of Galicia, Spain, were analysed with conductimetric titrations. Molar conductivities of 84-236 [μ S/cm and charge distributions of 0.42-0.74 were obtained when the concentrations of the extract were increased from 40 to 100 mg/litre. These variations were explained using the counter ion condensation theory. The distance between the charged groups of poly ions, the volume of the counter ion condensation and the Debye-Huckel potential were calculated. The results for eucalyptus were different from those of the other two species at higher concentrations. This behaviour was in agreement with the less acidic nature of the eucalyptus extract.

L3 ANSWER 41 OF 74 VETU COPYRIGHT 2008 THE THOMSON CORP on STN

AN 1994-61370 VETU

TI Medicinal plants in the treatment of diseases in fish in Mexico. (La herbolaria medicinal en el tratamiento de las enfermedades de los peces en Mexico)

AU Auro de Ocampo A; Jimenez M E

CS Univ.Nac.Auton.Mexico

LO Mexico City, Mex.

SO Vet.Mex. (24, No. 4, 291-95, 1993) 54 Ref.

AV Departamento de Produccion Acuicola, Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autonoma de Mexico, 04510, Mexico, D.F.

LA Spanish
DT Journal
FA AB; LA; CT
AN 1994-61370 VETU
AB Experiences with plants used in traditional medicine for the treatment of diseases in freshwater fish (rainbow trout, tilapia, carp) are reported. Preparations of garlic (*Allium sativum*), onion (*Allium cepa*), pine (*Pinus teocote*), camomile (*Helenium quadridentatum*), chestnut (*Castanea sativa*), *Chenopodium ambrosioides*, *Buddleia americana*, *Ligustrum japonicum*, *Erythrina americana* and clove (*Eugenia caryophyllus*) have been successfully applied against fungal (*Saprolegnia*), protozoan (*Costia necatrix*, *Ichthyophthirius multifiliis*) and nematode (*Capillaria* and *Spirocamellanus* sp.) parasites as well as for immobilization of the fish. The most popular plant formulations used in pisciculture are infusions, macerates, fresh juice and ointments.

ABEX The use of a macerate of pine needles (*Pinus teocote*) applied at 10 ppm to water over 4 days has shown high efficacy (93.26%) against the parasite *Ichthyophthirius multifiliis* (ich) in fish. Addition of freshly ground garlic at 200 mg/l to aquarium water for 6 days has given 100% efficacy against *saprolegniasis* in rainbow trout. *Helenium quadridentatum* infusion (30 g/l given by drip) over 15 days has also been effective. Effective treatment of costiasis in tilapia (*Oreochromis* sp.) has been achieved with a macerate of *Ligustrum japonicum* leaves (25-30 g/l water) or a crude extract (49 mg/l) of the Mexican plant, tepozan (*Buddleia americana*). Nematicide activities against *Capillaria* and *Spirocamellanus* sp. in tilapia and carp have been demonstrated with aqueous and liposoluble extracts of onion (400 mg/l for 5 days) and with ground chestnut infusions against these nematodes in ornamental fish (*Gambusia moteada*), although with some side-effects (up to 20% mortality). Extracts of *Erythrina americana* flowers and essence of cloves have proved effective for the immobilization of fish. Results indicate the need for further studies in evaluation of the potential of such herbal preparations in fish farming.

L3 ANSWER 42 OF 74 DRUGU COPYRIGHT 2008 THE THOMSON CORP on STN
AN 1993-39385 DRUGU P M T
TI The Use of Phytotherapeutics in Urology.
AU Syrynski W
LO Szczecin, Poland
SO Herba Pol. (38, No. 4, 195-201, 1992) 9 Ref.
CODEN: HPBIA9 ISSN: 0018-0599
AV Zaklad Farmakologii Klinicznej, Instytut Farmakologii i Toksykologii PAM, Powstancow Wielkopolskich 72, 70-111 Szczecin, Poland.

LA Polish
DT Journal
FA AB; LA; CT
FS Literature
AN 1993-39385 DRUGU P M T
AB A brief review of the therapeutic use of plant preparations for disorders of the urinogenital system is presented. Plant extracts with relevant activities are discussed in terms of 4 categories, diuretics, antiseptics, drugs acting on micturition and drugs used for urinary tract stones. Such extracts have been used singly and as components of combined preparations. Plant preparations have found particular value in the treatment of prostatic hypertrophy.

ABEX Certain plant extracts have been used on account of their diuretic properties, which may be attributed to certain constituents, e.g. essential oils, flavonoids, saponins, xanthone derivatives and glycosides. Preparations of juniper berries (*Juniperus communis*), parsley (*Petroselinum sativum*), golden rod (*Solidago virgaurea*) and birch leaves (*Betula* sp.) are all used as diuretics. Plant extracts displaying weak antiseptic activity in the urinary tract

include bearberry (*Arctostaphylos uva-ursi*), sandalwood oil and watercress oil (*Nasturtium* sp.). A group of plant preparations with favorable effects upon micturition, which have been used in treatment of prostatic hypertrophy in the early stages include willow herb (*Chamaenerion angustifolium*), loosestrife (*Lythrum salicaria*), cucurbit seeds, nettle (*Urtica dioica*) and pollen extracts. Active components of such plants include steroids, which may inhibit testosterone, protein constituents with possible binding affinity for sex hormones and agents producing relaxation of the detrusor muscle. Finally, extracts of chestnut (*Castanea sativa*) and madder root (*Rubia tinctora*) have been used in the treatment of urolithiasis. These extracts also show diuretic and antiinflammatory properties. (BM) (Zastosowanie Fitoterapeutykow w Urologii.)

L3 ANSWER 43 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 21

AN 91:107995 CABA

DN 19911958386

TI Fluorescence spectroscopy of aqueous leaf litter extracts and their complexes with aluminum

AU Shotyk, W.; Sposito, G.

CS Geological Inst., Univ. Berne, CH-3012 Berne, Switzerland.

SO Soil Science Society of America Journal, (1990) Vol. 54, No. 5, pp. 1305-1310. 30 ref.

ISSN: 0361-5995

DT Journal

LA English

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB Aqueous extracts of leaf litter from three tree species (*Castanea sativa*, *Pinus monticola* and *Salix* spp.) were examined by conventional excitation and synchronous-scan excitation fluorescence spectroscopy. The spectra obtained varied with the plant source of the leaf litter extract (LLE) as well as with the LLE concentration. This sensitivity to organic-matter origin indicates that fluorescence spectroscopy can distinguish LLE of differing provenance. The synchronous-scan spectra of the LLE showed some peaks that decreased in relative intensity with increasing LLE dilution, and some that increased with increasing dilution. This behaviour was attributed to the presence of both Type 1 fluorophores, which are not quenched because they do not form charge-transfer complexes with fluorophores, which are quenched by the formation of charge-transfer complexes and self-quenching processes, leading to intensity increases at high dilution. Synchronous-scan excitation spectra also were obtained for Al/LLE mixtures at pH 4.5, with the total Al concentration varying from 0 to 60 mmol/m³. The spectra showed that Al-complex formation may result either in increases of relative fluorescence intensity or in fluorescence quenching, depending both on the source of LLE and on its concentration. This result may reflect a concentration dependence of charge complex formation and the possibility that excited-state complexes of Al are less fluorescent than ground-state Al complexes.

L3 ANSWER 44 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 22

AN 90:121646 CABA

DN 19901948285

TI Ligand concentration effects on aluminum complexation by a chestnut leaf litter extract

AU Shotyk, W.; Sposito, G.

CS Inst. of Geology, Univ. of Bern, 3012 Bern, Switzerland.

SO Soil Science Society of America Journal, (1990) Vol. 54, No. 3, pp. 933-935. 11 ref.

ISSN: 0361-5995

DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB The quenching of fluorescence at an emission wavelength dependent on the ligand concentration was used to measure organically complexed Al at pH 4.5 across a range of dissolved organic carbon (DOC) concentrations of chestnut (*Castanea sativa*) leaf-litter extract. Simultaneous measurements of total inorganic Al were made by a 15-s reaction with 8-hydroxyquinoline. These data were combined to calculate quasiparticle model complex stability coefficients (cKT) for Al binding. For the range of DOC from 26 to 150 g/m³, the variation in the value of log cKT was not statistically significant. A conditional stability constant for a 1:1 quasiparticle Al/leaf-litter complex was calculated after correcting cKT for Al hydrolysis and ligand protonation. Its mean value varied from 108.9 to 108.3 across the range of DOC investigated, but was also not significantly dependent on DOC according to statistical criteria. It was concluded that fluorescence quenching can be used to determine organically bound Al for an environmentally important range of leaf-litter DOC concentrations.

L3 ANSWER 45 OF 74 USPATFULL on STN
AN 89:58647 USPATFULL
TI Assaying allergen specific IgE levels with fluorogenic enzyme labeled antibody
IN Calenoff, Emanuel, Burlingame, CA, United States
Jones, Ruth M., Los Altos, CA, United States
Tsay, Yuh-Geng, San Jose, CA, United States
Scott, John R., Mountain View, CA, United States
PA Minnesota Mining and Manufacturing Company, St. Paul, MN, United States (U.S. corporation)
PI US 4849337 19890718
AI US 1988-144730 19880114 (7)
RLI Continuation of Ser. No. US 1983-462585, filed on 31 Jan 1983, now abandoned which is a continuation-in-part of Ser. No. US 1982-444622, filed on 26 Nov 1982, now abandoned which is a continuation-in-part of Ser. No. US 1982-434061, filed on 13 Oct 1982, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Nucker, Christine M.
LREP Sell, Donald M., Kirn, Walter N., Goldman, Philip M.
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1347

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for identifying and quantifying allergen specific IgE levels in patent serum by conjugating the IgE in the serum with allergens adhering to an insoluble support, conjugating the serum IgE with an enzyme labeled anti-IgE antibody, contacting the enzyme label with a solution of a substrate which will yield a fluorescent product in the presence of the enzyme, and measuring the level of fluorescence in the solution. Special reagents and their manufacture are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 46 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 90:57983 CABA
DN 19901943476
TI Cu(II) binding of organic material dissolved by chromatographic fractionation (DOM) in aqueous leaf litter extracts

Cu(II)- Bindung durch Chromatographie-Fractionen gelosten organischen
Materials GOM in wassrigen Laubstreuextrakten

AU Luster, J.; Blaser, P.; Magyar, B.

CS Eidg. Forschungsanstalt fur Wald, Schnee und Landschaft, Zurcherstr. 111,
8903 Birmensdorf, Switzerland.

SO Mitteilungen der Deutschen Bodenkundlichen Gesellschaft, (1989) Vol. 59,
No. 1, pp. 411-416. Tagung der Deutschen Bodenkundlichen Gesellschaft,
3-10 Sep. 1989, Munster, German Federal Republic. 5 ref.

Price: Conference paper; Journal article .

ISSN: 0343-107X

DT Journal

LA German

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB The objectives of this study were to investigate whether: (1) dissolved
organic matter (DOM) in soil solution could be fractionated according to
significant differences in their bonding with metal ions; (2) if so, could
specific bonding behaviour be assigned unambiguously to each fraction; (3)
information on the structure of the fractions and the mechanisms of
separation could assist in evaluating the metal bonding in the entire DOM.
Fresh leaf litter from European chestnut [*Castanea*
sativa], beech [*Fagus sylvatica*] and larch [*Larix*] was dried,
ground, extracted with distilled water (15 h) and filtered (0.45
[μ m]). The extract was treated using a strongly acidic cation
exchanger, and freeze dried. DOM was separated using ion exchange
chromatography. The separation method yielded four fractions for the
chestnut extract, and two each for the beech and larch
extracts (F1, F4). The method did not result in fractionations
according to metal bonding behaviour as differences in stability constants
and C/Cu ratios were too small and it was not possible to assign a
specific Cu bonding behaviour to F1 or F4. The larch extract was
significantly different from the beech extract. The lack of
differences in stability constants was attributed to the proportion of
carboxylic groups being similar for all fractions.

L3 ANSWER 47 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 90:118084 CABA

DN 19901426697

TI Estimation of the nutritive value of the apical parts of shoots of some
Mediterranean trees and bushes

Stima del valore nutritivo delle parti apicali dei ricacci di alcune
specie arboree ed arbustive mediterranee

AU Antongiovanni, M.; Grifoni, F.

CS Dipartimento di Scienze Zootecniche, Via delle Cascine 5, 50144 Firenze,
Italy.

SO Zootecnica e Nutrizione Animale, (1989) Vol. 15, No. 1, pp. 73-80. 10 ref.
ISSN: 0390-0487

DT Journal

LA Italian

SL English

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB Chemical composition, gross energy content (GE) and digestibility of
organic matter (OMD) in vitro were estimated in 50 samples of tops and
leaves of shoots of *Quercus pubescens*, *Castanea*
sativa and *Q. cerris* and of small branches of *Erica arborea* and
Arbutus unedo, browsed by ruminants in Central Italy. Values are
tabulated. The most statistically reliable regression equations for
estimating GE and OMD were $GE \text{ (kcal/kg DM)} = 4081.68 + 122.90 EE + 9.61 CF$
 $+ [\text{beta}]$ and $OMD (\%) = 34.21 + 2.04 CP - 0.69 CF + [\text{beta}]$ where EE is
ether extract, CF crude fibre, CP crude protein and [beta] a
correction factor depending on species. GE and OMD values can be used to

estimate energy fractions.

L3 ANSWER 48 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 23
AN 89:19415 CABA
DN 19891931257
TI Fluorescence quenching and aluminium complexation by a chestnut leaf
litter extract
AU Shotyk, W.; Sposito, G.
CS Dep. Geology, Univ. Western Ontario, London, Ont. N6A 5B7, Canada.
SO Soil Science Society of America Journal, (1988) Vol. 52, No. 5, pp.
1293-1297. 6 tab. 20 ref.
ISSN: 0361-5995
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Fluorescence quenching (FQ) on addition of Al(III) to aqueous solutions of
chestnut (*Castanea sativa* L.) leaf litter
extract (LLE) has been interpreted previously as a parameter
directly proportional to the mole fraction of Al-complexed organic ligands
in the LLE. To provide independent confirmation of this interpretation, FQ
and labile Al (defined by a 15-s reaction with 8-hydroxyquinoline) were
measured simultaneously in mixtures of Al(ClO₄)₃ with the LLE. Solutions
containing about 0.3 kg m⁻³ organic matter with total Al concentrations in
the range 0 to 60 mmol m⁻³ were investigated at pH 4.0, 4.5, and 5.0. The
total concentration of inorganic Al in the solutions (Al_{in}) at each pH
value was calculated as the sum of labile Al and the concentrations of the
species Al(OH)₂⁺ and Al(OH)₄⁻ as estimated with thermodynamic hydrolysis
constants. The independently-measured parameters, FQ and Al_{in}, then were
used to calculate an overall stability coefficient for Al complexation by
the leaf litter extract at each pH value. The values
obtained were in good agreement with previous determinations of the
stability coefficients based on fluorescence quenching alone. The
conditional stability constant $c[\beta]_{0/0}$ for the quasiparticle species
AlL (L = organic ligands) was found to have the value 108.7[plusmn]0.5 in
agreement with a previous estimate of 108.6[plusmn]0.1 derived from FQ
data only. These results confirmed the hypothesis that fluorescence
quenching is proportional to Al complexation by the ligands in the LLE.

L3 ANSWER 49 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 24
AN 88:97230 CABA
DN 19881925996
TI Fluorescence quenching and copper complexation by a chestnut leaf litter
extract: spectroscopic evidence
AU Sposito, G.; Senesi, N.; Holtzclaw, K. M.
CS Dep. Soil and Environmental Sci., Univ. California, Riverside, CA 92621,
USA.
SO Soil Science Society of America Journal, (1988) Vol. 52, No. 3, pp.
632-636. 4 fig., 1 tab. 19 ref.
ISSN: 0361-5995
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Fluorescence quenching on addition of Cu(II) to aqueous solutions of
chestnut (*Castanea sativa* L.) leaf litter
extract (LLE) has been interpreted previously in terms of Cu
complexation by LLE organic ligands. To provide direct evidence of these
complexes, as well as information about their coordination structures,
infrared (IR) and electron spin resonance (ESR) spectroscopy were applied
to Cu/LLE mixtures that showed increasing fluorescence quenching with
increasing pH. The Cu/LLE mixtures were prepared with approximately

equimolar concentrations of Cu and LLE binding sites (200 mmol m⁻³) at pH values in the range 4 to 7. The IR spectra indicated the existence of Cu complexes involving carboxylate groups, even at pH 4. The more sensitive ESR spectra showed that Cu(II) could displace Fe(III) and Mn(II) from LLE binding sites, and that inner-sphere complexes between Cu and LLE ligands were formed. These complexes involved carboxylate ions and H₂O molecules at pH <6, and both O⁻ and N-containing ligands at pH 6 and 7. These results confirmed the hypothesis that fluorescence quenching is associated with strong Cu complexation by organic ligands in the LLE.

L3 ANSWER 50 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 89:19140 CABA
DN 19891930867
TI Cu(II) complexing by molecular filtration fractions of a sweet chestnut leaf litter extract
Cu(II)-Komplexierung durch Molekularfiltrations-Fraktionien eines Edelkastanien-Laubstreu-Extraktes
AU Luster, J.; Magyar, B.; Blaser, P.
CS Eidg. Anstalt für das forstliche Versuchswesen EAFV, Zürcherstr. 111, 8903 Birmensdorf, Switzerland.
SO Mitteilungen der Deutschen Bodenkundlichen Gesellschaft, (1988) Vol. 56, pp. 203-208. 1 fig., 3 tab. 4 ref.
ISSN: 0343-107X
DT Journal
LA German
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB The extraction, molecular filtration and complexing procedures are described. The complexing of Cu(II) by the complete litter extract was due mainly to the activity of the low molecular weight fractions.

L3 ANSWER 51 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 25
AN 87:95465 CABA
DN 19871916156
TI Spectrofluorometric investigation of trace metal complexation by an aqueous chestnut leaf litter extract
AU Blaser, P.; Sposito, G.
CS Swiss Federal Inst. of For. Res., CH-8903 Birmensdorf, Switzerland.
SO Soil Science Society of America Journal, (1987) Vol. 51, No. 3, pp. 612-619. 6 fig., 5 tab. 27 ref.
ISSN: 0361-5995
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB Fluorescence spectroscopy was investigated as a method for quantifying trace metal complexes with the organic ligands in a water extract of chestnut (*Castanea sativa*) leaf litter. Copper(II) and aluminum(III) were selected as environmentally significant metals with which to characterize the method as applied to the leaf litter extract. Solutions of Cu or Al mixed with the extract exhibited fluorescence that decreased in relative intensity as the total metal concentration and/or the pH increased. Data were obtained in the pH range 5 to 8 for total Cu concentrations up to 160 mmol m⁻³ and in the pH range 4 to 8 for total Al concentrations up to 100 mmol m⁻³. The fluorescence intensity data for Cu were comparable to those obtained in previous studies for solutions of Cu and soluble humic materials. A conventional equation was used to calculate an overall stability coefficient for metal complexation by the leaf litter extract. The pH-dependence of this stability coefficient was modeled mathematically in terms of pH-independent conditional stability constants through a new application of the Scatchard quasiparticle model.

The quasiparticle species $\text{Cu}(\text{OH})\text{nH}_0.9\text{L}$ ($\text{n} = 0$ or 1 ; L = organic ligands) were sufficient to model the Cu data with the two pH-in dependent conditional stability constants, $c[\text{Beta}]0/0.9 = 10^{12.6}$ and $c[\text{Beta}]1/0.9 = 10^{5.3}$. For the Al data, the conditional stability constants $c[\text{Beta}]0/0 = 10^{8.55}$ and $c[\text{Beta}]2/0 = 10^{-1.8}$ were obtained for the quasiparticle species $\text{Al}(\text{OH})\text{nL}$ ($\text{n} = 0$ or 2). These stability constants can be used in computer speciation programs to estimate organic complexation of Cu(II) or Al(III) by the leaf litter extract, but otherwise have no molecular chemical significance.

L3 ANSWER 52 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 26
 AN 89:44073 CABA
 DN 19890631877
 TI Identification of volatiles from leaves of *Castanea sativa* Miller and electroantennogram responses of *Cydia splendana* Hubn. (Lep. Tortricidae)
 AU Rotundo, G.; Tonini, C.; Guglielmetti, G.; Rotundo, A.
 CS Dipartimento di Entomologia e Zoologia Agraria, Univ. Napoli, Portici, Italy.
 SO Annali della Facolta di Scienze Agrarie della Universita degli Studi di Napoli, Portici, IV, (1987) Vol. 21, pp. 20-38. 21 ref.
 DT Journal
 LA English
 SL Italian
 ED Entered STN: 1 Nov 1994
 Last Updated on STN: 1 Nov 1994
 AB *Castanea sativa* [chestnut] leaves emit compounds that stimulate the antennae of males and females of *Cydia splendana*, a serious pest of chestnut fruit in Italy and other European countries. The electroantennogram (EAG) responses to leaf extracts (immersion, distillation and vacuum distillation) were similar for males and females. GLC and GLC-MS analyses of extracts and active fractions identified 35 compounds, 14 of which are EAG active. Nonanal elicited the greatest electrical response. (E)-2-hexenal was the only compound identified in all the extracts. Other green leaf volatiles such as (E)-2-hexen-1-ol, (E)-3-hexen-1-ol and (Z)-3-hexen-1-ol were identified in distillation and vacuum distillation extracts. This was the first time (E)-2-hexen-1-ol had been identified in the Fagaceae. EAG recording showed the antennae of *C. splendana* to be mainly responsive to the above compounds and other green leaf volatiles. Of 84 chemicals tested, the highest EAG responses were registered for 2-hexanol in females and nonanal in males. It is suggested that the biologically active compounds identified may be used as kairomones for sexual attraction and oviposition.

L3 ANSWER 53 OF 74 CABA COPYRIGHT 2008 CABI on STN
 AN 86:93270 CABA
 DN 19861907371
 TI Active and total Fe in *Castanea sativa* and their relation to other nutrients
 AU Guzman, M.; Urrestarazu, M.; Romero, L.
 CS Pl. Physiol. Dep., Fac. of Sci., Granada Univ., Granada, Spain.
 SO Journal of Plant Nutrition, (1986) Vol. 9, No. 3-7, pp. 909-921. 9 fig., 2 tab. 17 ref.
 ISSN: 0190-4167
 DT Journal
 LA English
 ED Entered STN: 1 Nov 1994
 Last Updated on STN: 1 Nov 1994
 AB The contents of extractable P, K, Fe, Mn and Zn, the Fe-Mn-Zn balance and Fe Index were studied throughout the vegetative cycle in leaves of *Castanea sativa*. To assess their significance in foliar diagnosis the data obtained were related to total

plant levels of these elements. Concentrations of extractable nutrients were found to follow the same pattern of changes as total amounts during the vegetative cycle.

L3 ANSWER 54 OF 74 USPATFULL on STN
AN 85:40345 USPATFULL
TI Fluorometirc enzyme inhibition immunoassay for measuring potency of allergen extracts
IN Calenoff, Emanuel, Burlingame, CA, United States
Tsay, Yuh-Geng, San Jose, CA, United States
Jones, Ruth M., Los Altos, CA, United States
Scott, John R., Mountain View, CA, United States
PA Axionics, Inc., CA, United States (U.S. corporation)
PI US 4528267 19850709
AI US 1983-476440 19830317 (6)
RLI Continuation-in-part of Ser. No. US 1982-444622, filed on 26 Nov 1982
And a continuation-in-part of Ser. No. US 1982-434061, filed on 13 Oct 1982
DT Utility
FS Granted
EXNAM Primary Examiner: Marantz, Sidney
LREP Walker, William B.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1299

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An inhibition assay for measuring the potency of allergen extracts by incubating a mixture of allergen extract and reference allergen specific IgE in a buffered solution with an insoluble support to which reference allergen is adhered. The conjugated IgE adhering to the insoluble support is reacted with an enzyme labeled anti-IgE antibody and the enzyme label is contacted with a solution of a substrate which will yield a fluorescent product in the presence of the enzyme. The level of fluoresece in the solution is measured. The percentage of inhibition of the allergen specific IgE is determined from fluorescence levels measured for various extract concentrations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 55 OF 74 CABA COPYRIGHT 2008 CABI on STN DUPLICATE 27
AN 84:95801 CABA
DN 19841987201
TI Composition and acidic functional group chemistry of an aqueous chestnut leaf litter extract
AU Blaser, P.; Sposito, G.; Holtzclaw, K. M.
CS Swiss Federal Inst. of Forestry Research, CH-8903 Birmensdorf, Switzerland.
SO Soil Science Society of America Journal, (1984) Vol. 48, No. 2, pp. 278-283. 5 fig., 3 tab. 35 ref.
ISSN: 0361-5995
DT Journal
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994
AB The elemental composition, amino acid distribution, infrared spectrum, and carboxyl group content of a chestnut (*Castanea sativa*) leaf litter extract were determined. Proton titration data were obtained by both continuous and discontinuous titrations. The overall titration endpoint could be identified directly by conductometric titration. Proton formation functions for the extract were computed from the two sets of titration data. In order to explain

protonation during titration, the data were fitted to a simple chemical model by nonlinear regression analysis. From this calculation, the acidic properties of the litter extract could be modeled assuming three classes of acidic functional groups, with logarithms of the conditional protonation constants in the ranges: 4.00-4.25, 6.00-6.75, and 8.7-9.0.

- L3 ANSWER 56 OF 74 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 28
- AN 1981:157871 BIOSIS
DN PREV198171027863; BA71:27863
TI METAL BINDING PROPERTIES OF LEAF LITTER EXTRACTS 2. A BIOASSAY TECHNIQUE.
AU BLASER P [Reprint author]; LANDOLT W; FLUEHLER H
CS SWISS FED INST FOR RES, CH-8903 BIRMENSdorf, SWITZ
SO Soil Science Society of America Journal, (1980) Vol. 44, No. 4, pp.
717-720.
CODEN: SSSJD4. ISSN: 0361-5995.
- DT Article
FS BA
LA ENGLISH
- AB A biological method is proposed to determine the maximum Cu binding ability and the conditional stability constant of leaf [*Castanea sativa* L.] litter extracts. Free cupric ions reduce the $^{14}\text{CO}_2$ uptake of algae [Lake Zurich, Switzerland]. In the presence of complex forming organic substances the observed depression of the relative CO_2 uptake can be considered as a measure of the unbound ionic Cu concentration. Comparing the CO_2 uptake response function of solutions, with and without organic constituents spiked with variable amounts of Cu, yields a functional relationship between bound and free Cu. These functions can be interpreted with a sequential form of the Langmuir equation from which the maximum binding ability and the conditional stability constant are obtained. The presence of algae modifies the complexing parameters indicating that the values measured with nonbiological methods require careful interpretation when their significance in natural soils is considered.
- L3 ANSWER 57 OF 74 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 29
- AN 1981:143751 BIOSIS
DN PREV198171013743; BA71:13743
TI METAL BINDING PROPERTIES OF LEAF LITTER EXTRACTS 1. DISCONTINUOUS SPECTROPHOTOMETRIC TITRATION WITH IRON AND COPPER.
AU BLASER P [Reprint author]; FLUEHLER H; POLOMSKI J
CS SWISS FED INST FOR RES, CH-8903 BIRMENSdorf, SWITZ
SO Soil Science Society of America Journal, (1980) Vol. 44, No. 4, pp.
709-716.
CODEN: SSSJD4. ISSN: 0361-5995.
- DT Article
FS BA
LA ENGLISH
- AB A spectrophotometric titration method is proposed with which the maximum Fe or Cu binding ability of leaf [*Castanea sativa* L.] litter extracts and the conditional stability constants of the organo-metallic compounds can be determined. The method was checked against the dialysis method of Zunino and Martin (1977) using Cu as titrant. With Fe instead of Cu the spectrophotometric titration yields plausible results. In the latter case, the results cannot be verified with dialysis experiments because of the colloidal nature of aqueous $\text{Fe}(\text{OH})_3$. The distribution between bound and free metal ions can be described by rectangular hyperbolas (Langmuir type regression models). The measurements deviate systematically from the simple Langmuir equation. These deviations can be adequately described if the heterogeneous mixture of dissolved organic constituents is considered as a system of 2

independent components with distinct distribution isotherms. The errors involved in the estimation of the conditional stability constants and of the maximum binding abilities are analyzed.

L3 ANSWER 58 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 79:14913 CABA
DN 19790373092
TI The pharmacological activity of some native plants on the nervous system
A propos de l'activite pharmacologique de quelques plantes indigenes sur
le systeme nerveux
AU Mahe, M.; Driessche, J. van den; Girre, L.
CS U.E.R. Clinique et Therapeutique Medicals, 35043 Rennes Cedex, France.
SO Plantes Medicinales et Phytotherapie, (1978) Vol. 12, No. 4, pp. 248-258.
5 pl. 6 ref.
ISSN: 0032-0994

DT Journal

LA French

SL English

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB Pharmacological properties are reported for extracts of
Castanea vesca [C. sativa] (leaves),
Chelidonium majus (aerial parts), Centranthus ruber (aerial parts), Ilex
aquifolium (leaves), Cheiranthus cheiri (flowering plants),
Fagus sylvatica (leaves), Ulex europaeus (flowering plants) and
Calluna vulgaris (leaves).

L3 ANSWER 59 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 78:100040 CABA

DN 19781940619

TI A method to quantify soil-microhabitat complexity and its application to a
study of soil animal species diversity

AU Anderson, J. M.

CS Dep. of Biol. Sciences, Univ. of Exeter, Devon, UK.

SO Soil Biology & Biochemistry, (1978) Vol. 10, No. 1, pp. 77-78. 7 ref.

ISSN: 0038-0717

DT Journal

LA English

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB The study was carried out during October/November in six woodland soils
under sweet chestnut (Castanea
sativa). Microhabitat diversity was measured in blocks of soil and
litter by examining transects for 24 types of microhabitats (leaf
and wood fragments of various size, mycelium, faeces, etc.).
Cryptostigmata (excluding Oppia spp.) were extracted from
samples of litter, fragmented litter and humus horizons. The relationship
between habitat diversity and mite species diversity was analysed
statistically and discussed.

L3 ANSWER 60 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 78:25095 CABA

DN 19770548696

TI Relations between a phytophagous insect:the sugar-beet moth (Scrobipalpa
ocellatella Boyd., Lepidopt. Gelechiidae) and its food-plant. Fluctuations
in egg-laying behaviour in natural populations in the absence of chemical
signals of plant origin

Relations entre un insecte phytophage: la teigne de la betterave
(Scrobipalpa ocellatella Boyd., Lepidopt. Gelechiidae) et sa plante-hote.
Fluctuations du comportement de ponte dans des populations naturelles en
absence de signaux chimiques d'origine vegetale

AU Robert, P. C.; Blaisinger, P.; Simonis, M. T.

CS Station de Zoologie, INRA, 68021 Colmar, France.
SO Colloques Internationaux du Centre National de la Recherche Scientifique, (1977) pp. 269-283. 2 fig. 13 ref.
Meeting Info.: The behaviour of insects and the trophic environment. Tours 13-17 September 1976.: Comportement des insectes et milieu trophique. Tours 13-17 septembre 1976.

DT Journal
LA French
SL English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994

AB In laboratory investigations on strains of *Scrobipalpa ocellatella* (Boyd) (an oligophagous species that attacks *Beta* spp.) from 2 areas of France, all females oviposited in the presence of beet. In the presence of a rough substrate impregnated with beet extract, less than 10% of females failed to oviposit, but in the presence of a chemically neutral rough substrate many females failed to oviposit, the proportion varying from 20 to 70% between years for a strain from one area. When the rough substrate was impregnated with an extract of leaves of chestnut (*Castanea sativa*), the proportion of non-ovipositing females increased to 75-90%. Since suitable food-plants are plentiful in the areas from which the stocks were derived, the variation from year to year in the proportions of females that fail to oviposit in the absence of chemical signals from the plants is difficult to explain.

L3 ANSWER 61 OF 74 CABA COPYRIGHT 2008 CABI on STN
AN 77:28263 CABA
DN 19770542036
TI Inhibitory action of chestnut-leaf extracts (*Castanea sativa* Mill.) on oviposition and oogenesis of the sugar beet moth (*Scrobipalpa ocellatella* Boyd.; Lepidoptera, Gelechiidae)

AU Robert, P. C.; Jermy, T. [EDITOR]
CS Station de Zoologie, INRA, 68 Colmar, France.
SO The host-plant in relation to insect behaviour and reproduction, (1976) pp. 223-227. 3 ref.
Publisher: Plenum Publishing Corporation. New York

CY United States
DT Miscellaneous
LA English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994

AB In studies in France, sugar-beet or an aqueous extract of its leaves attracted gravid females of *Scrobipalpa ocellatella* (Boyd), and stimulated oviposition and oogenesis. An aqueous extract of the leaves (but not the fruit or wood) of chestnut (*Castanea sativa*) was repellent to gravid females of the gelechiid, inhibited oviposition and did not stimulate oogenesis. Spray application of this chestnut-leaf extract to sugar-beet masked the stimulatory effects of the food plant; treated beet was no longer attractive to gravid females and did not stimulate oviposition or oogenesis. Thus the sugar-beet had, in effect, been transformed into a non-food-plant.

L3 ANSWER 62 OF 74 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2008) on STN
AN 76:121264 AGRICOLA
DN 76-9122000
TI Inhibitory action of chestnut-leaf extracts (

Castanea sativa Mill.) on oviposition and oogenesis of the sugar beet moth (*Scrobipalpa ocellatella* Boyd.; Lepidoptera, Gelechiidae)

AU Robert, P C
AV DNAL (QH301.S9)
SO Symp Biol Hung, 1976 No. 16, pp. 223-227.
DT Journal; Article
LA English

L3 ANSWER 63 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 75:40744 CABA

DN 19750628539

TI Inhibition of the synthesis of kaolinite by several aqueous extracts of plant remains

AU Guitian Ojea, F.; Coladas Calvo, V.

SO Annales de Edafologia y Agrobiologia, (1974) Vol. 33, No. 11/12, pp. 979-989. EMB. 10 ref.

DT Journal

LA Spanish

SL English

ED Entered STN: 1 Nov 1994

Last Updated on STN: 1 Nov 1994

AB Kaolinite was synthesized under hydrothermal conditions and in the presence of fulvic acids and aqueous extracts of fallen leaves of *Castanea sativa*, *Quercus robur* and *Erica umbellata*. Under these conditions, all the extracts inhibited kaolinite formation to various degrees, but only extracts of *E. umbellata* stopped it completely. Ericaceous vegetation is present over most of the podzolized soils in Galicia, and the results of the study support the hypothesis that the frequently observed inhibition of formation of new clay minerals from Si and Al freed during the breakdown of primary minerals is attributable to fulvic acids or organic compounds derived from vegetation.

L3 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1975:543866 CAPLUS

DN 83:143866

OREF 83:22597a,22600a

TI Chemichromatographic assay of gallic acid in plant material

AU Gera, Janusz; Schneider, Irena; Tomkowiak, Jan

CS Inst. Mat. Fiz. Chem., Akad. Roln., Poznan, Pol.

SO Roczniki Akademii Rolniczej w Poznaniu (1974), 73, 51-5

CODEN: RARPCF

DT Journal

LA Polish

AB A chemichromatog. method of quantitating μg quantities of gallic acid was described that employed Whatman Number 1 filter paper impregnated with Cu ferricyanide. Gallic acid, applied to the impregnated filter paper, formed colored spots whose surface area was in direct relation to the amount of gallic acid. Unknown quantities of gallic acid were determined by comparison with standard samples. The method was successfully employed to determine the percent of gallic acid in plant material, especially in the bark

of

Quercus, the leaves of *Vaccinium vitis idaeae* and of *Thea sinensis*, and in tannin exts. of *Castanea Vesca*.

L3 ANSWER 65 OF 74 CABA COPYRIGHT 2008 CABI on STN

AN 75:35168 CABA

DN 19740618872

TI Contribution to knowledge of the chemical components of tannin extracts from domestic raw materials [in Yugoslavia]

AU Biffl, M.
SO Glasnik za Sumske Pokuse, Sveuciliste u Zagrebu, (1974) No. 17, pp. 5-90.
169 ref.
DT Journal
LA Serbo-Croatian
SL English
ED Entered STN: 1 Nov 1994
Last Updated on STN: 1 Nov 1994

AB Gives the results of studies by chromatography and ultraviolet and infra-red spectrophotometry to determine the chemical constituents of tannin extracts from the wood of *Castanea sativa* and *Quercus robur* and from the leaves of *Rhus cotinus*. The results are described in detail in the 5-page English summary.

L3 ANSWER 66 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1975:121634 CAPLUS

DN 82:121634

OREF 82:19443a,19446a

TI Chemical components of tannin extracts from domestic raw materials

AU Biffl, Mladen

CS Yugoslavia

SO Glasnik za Sumske Pokuse (1974), 17, 5-90

CODEN: GLSPA8; ISSN: 0581-7498

DT Journal

LA Croatian

AB The chemical components of domestic tannin exts. such as those of the wood of sweet chestnut (*Castanea vesca*), the wood of pedunculate oak (*Quercus pedunculata*), and the leaves of domestic sumac (*Rhus cotinus*) were determined. The exts. were examined by 2-dimensional chromatog. and uv and ir spectrophotometry. Tannin anal. of the original exts. and their fractions was performed by the semimicro filter method. The active tannin substances in the chestnut extract were evenly distributed in the fractions. The chestnut extract and its fractions contained gallic acid, 3,6-digalloyl glucose, pyrogallol, resorcinol, traces of chebulinic or chebulagic acids, and sugars. It is characteristic that free ellagic acid was not present. Chromatograms of oak tannin and its fractions exhibited 25 components, and chromatograms of sumac tannin extract and its fractions exhibited 10 components. Oak tannin extract contained gallic acid, 3,6-digalloylglucose, chebulagic acid, simple phenols (including resorcinol and pyrogallol) and sugars. Sumac tannin extract contained gallic acid, 3,6-digalloylglucose, pentagalloylglucose, a catechol compound, and traces of unknown substances. The sugars found in the 3 tannins are discussed.

L3 ANSWER 67 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1967:505968 CAPLUS

DN 67:105968

OREF 67:19947a,19950a

TI Identification of (+)-abscisin II [(+)-dormin] in plants and measurement of its concentrations

AU Milborrow, B. V.

CS Shell Res. Ltd., Kent, UK

SO Planta (1967), 76(2), 93-113

CODEN: PLANAB; ISSN: 0032-0935

DT Journal

LA English

AB (+)-Abscisin II has been identified in the Et₂O-soluble portion of the acidified extracted of apples, leaves and buds of ash, fruit and seeds of avocado, leaves of birch, rhizome of bracken, leaves of the heart of cabbage, milk and endosperm of coconut,

rhizome of couch grass, shoots of kidney beans, fruit of lemon, fruit of maize, fruit of olive, leaves of peach, skin and pulp of potato tubers, buds, bark, leaves, twigs, wood, and roots of sycamore, leaves of sweet chestnut leaves, stems and pseudocarp achenes of *Rosa canina*, achenes and pseudocarp of *R. arvensis*, and achenes of *R. rugosa*. It was identified by its general phys. properties, biol. activity, behavior in chromatog. and optical rotatory dispersion, as in Cornforth, et al. (CA 65: 17614h). On comparison of these properties with those of inhibitor β of Bennet-Clark and Kefford, (CA 47: 11304e) they appear to be identical. Detns. of (+)-abscisin in a number of the plant exts. was by calcn. from the specific optical rotation at the 1st pos. extremum ($\lambda = 289 \text{ m}\mu$). An inverse isotope dilution method indicated that ca. 2/3 of the (+)-abscisin II originally in the homogenates had been lost.

L3 ANSWER 68 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1955:11884 CAPLUS

DN 49:11884

OREF 49:2374b-g

TI Dehydrodigallic acid

AU Mayer, Walter

CS Heidelberg Univ., Germany

SO Ann. (1952), 578, 34-44

DT Journal

LA Unavailable

AB The dried leaves and shoots of *Castanea vesca*

extracted with water, the tannins precipitated with $\text{Pb}(\text{OAc})_2$, the Pb complex decomposed with H_2S , continuously extracted with ether and the extract evaporated gave "dehydrodigallic acid," $\text{C}_{14}\text{H}_{10}\text{O}_{10}$ (I) (from water). I, which formed 8% of the total tannins, was soluble to the extent of 0.6% in boiling water, and gave a pure blue color with FeCl_3 ; it had no definite m.p. but darkened between 240° and 260° , and was shown to be 2,3'-dicarboxy-4,5,5',6,6'-pentahydroxydiphenyl ether. I (1.83 g.) heated with 50 cc. of 2N NaOH in a H atmospheric 2 h. at 90° , cooled, and the mixture acidified, and continuously extracted with ether gave 0.827 g. gallic acid. I (1 g.), 10 cc. Ac_2O , and 3 drops H_2SO_4 heated 1 h. at 100° gave the penta-Ac derivative (II) of I, m. $210-11^\circ$ (from Me_2CO). II (0.2 g.) in 10 cc. Me_2CO treated with CH_2N_2 in ether gave the di-Me ester of II, m. $125-7^\circ$ (from aqueous Me_2CO). I (0.4 g.) with excess CH_2N_2 gave the hepta-Me derivative (III) of I, m. $111-13^\circ$ (from aqueous Me_2CO), b.p. $204-6^\circ$. III (0.42 g.) in MeOH and 5 cc. of 2N NaOH heated 1 h. at 100° gave, after acidification 0.36 g. needles, m. $247-9^\circ$, of the penta-Me ether of I; bis(p-bromophenacyl ester), m. $125-6^\circ$. I (0.2 g.) heated with 5 cc. H_2SO_4 5 min. at 100° and the mixture poured into water gave 0.14 g. 3,4,5,6,7-pentahydroxyxanthone-1-carboxylic acid, gradually decomposed above 220° , which formed with CH_2N_2 a penta-Me ether Me ester (IV), m. $155.5-7.5^\circ$ (from Me_2CO). IV (0.08 g.) in 10 cc. MeOH hydrolyzed with 5 cc. 2N NaOH 1 h. at 100° , the MeOH replaced with water, and the mixture acidified gave 0.62 g. free acid (V), m. $207-9^\circ$, which yielded a hygroscopic crystalline Na salt and a sparingly soluble K salt. The vacuum-dried K salt of 3,4,5-Me₂(HO)C₆H₂CO₂Me (from 0.4 g. K, 15 cc. MeOH and 2.12 g. ester) heated in a sealed tube with 3.05 g. 3,4,5-(MeO)₃C₆H₂CO₂Me, 0.1 g. Cu powder, and a trace of Cu acetate 2 h. at $110-20^\circ$ then 1 h. at 180° , the Me_2CO extract mixed with CH_2N_2 in Et₂O, the solution filtered, evaporated and the residue crystallized from aqueous MeOH, the di-Me 4,5,6,5',6'-pentamethoxy 1-1'-diphenyl ether 2,3'-dicarboxylate and the di-Me ester (VI) of I (2.2 g., m. $108-9^\circ$) purified by saponification and retreatment with CH_2N_2 , yielded colorless crystals, identical with III (mixed m.p.). From VI were prepared the acid and its bis(p-bromophenacyl ester), identical with the

corresponding derivs. of III. VI (0.22 g.) and 7 cc. H₂SO₄ heated 20 min. at 100°, the mixture diluted with water, and the product remethylated gave prisms identical with IV and yielding on alkaline hydrolysis an acid identical with V.

- L3 ANSWER 69 OF 74 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1951:9129 BIOSIS
DN PREV19512500009159; BA25:9159
TI Synthèse et dégradation des substances choliniques végétales.
AU DUCET, GASTON
SO COMPT REND ACAD SCI [PARIS], (1948) Vol. 227, No. 17, pp. 871-873.
DT Article
FS BA
LA Unavailable
ED Entered STN: May 2007
Last Updated on STN: May 2007
AB Investigations on the cholinic substances in several plants (soy-bean, Spanish chestnut, pea, etc.) Combined hydrosoluble choline (1) is identified with glycerophosphorylcholine (ratio choline P and speed of hydrolysis); non-hydrosoluble choline (2) with the choline of lecithins (wholly extractable by fat solvents. (1) is present especially in seeds, (2) in roots, stems, leaves, buds. (2) occurs in a greater amount in plants than (1) (the contrary results of other authors are explained by mistaken technic, producing supplementary choline by degradations). All the investigated plants contain lecithinases, able to produce not only (2) but (1): simple desiccation in air can start the process. Choline synthesis is possible only in organs in process of rapid growth (buds, but not grown leaves). When growth is being carried on, choline partially disappears and lecithins are synthesized. Glycerophosphorylcholine must be considered as an intermediate stage in the lecithin synthesis starting from the free choline. ABSTRACT AUTHORS: R. J. Gautheret
- L3 ANSWER 70 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1942:42539 CAPLUS
DN 36:42539
OREF 36:6749b-c
TI Characteristics of adsorbents used for purifying extracts containing vitamin K
AU Kizel, A.; Shamshikova, G.; Shelenina, E.
SO Biokhimiya (Moscow) (1941), 6(No. 4/5), 387-92
CODEN: BIOHAO; ISSN: 0320-9725
DT Journal
LA German
AB A number of natural and synthetic adsorbents were tested for their suitability for extracting vitamin K. The vitamin was extd . from chestnut, Castanea vesca Gaertn., leaves. The extracting liquid was redistd. petroleum ether, b. 60-90°. The yield was 4%, as compared with 2% obtained from alfalfa. The physiol. activity of the purified exts. was determined Best results were obtained with exts. purified with basic ZnCO₃, synthetic zeolite, or bentonite.
- L3 ANSWER 71 OF 74 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1937:8927 BIOSIS
DN PREV19371100009410; BA11:9410
TI No English Title Available.
AU IMPERIAL FORESTRY EXPERIMENTAL STATION
CS Meguro, Tokyo, Japan
SO (1933) pp. ii + 180p. Extracts from the Bulletin. II.

DT Book
FS BA
LA Unavailable
ED Entered STN: May 2007
Last Updated on STN: May 2007
AB Extracts in English of 36 papers published between 1915 and 1920. Included are papers on: determining age and yr. of plantation of *Cryptomeria japonica* (1-5) and fluorescence of infusions of wood (97-104), by M. FUJIOKA; insect enemies of white grubs (7), and insects attacking timber and bamboos (9-10), by M. YANO; chalcid flies injurious to conifer seed (8), by M. YANO and M. KOYAMA; forcing germination of urushi (*Rhus verni-cijera*) seed (29-31), and of *Magnolia hypoleuca* seed (41-45), and temperature for germination and sowing of *Zel-kowa serrata* seed (33-39), by M. KOYAMA; storage of tree seed (23-28), by M. KOYAMA and H. SHIRA-SAWA; timber borers in log ponds (11), by M. YANO and S. MORIYA; effect of "radiogenschlamm" on the growth of tree seedlings (47-49) and tannin extracts from kuri (*Castanea sativa*) wood (121-122), by S. MORIYA; durability of hiba (*Thujopsis dolabrata*) wood (13-14), red-plagues of sugi (*Cryptomeria japonica*) seedlings (15-18), and canker of sugi seedlings (19-21), by K. KITAJIMA; forest trees and mycorrhiza (51-52), coloring wood of growing trees (53-57, 59-61), and charcoal in pig-iron manufacture (105-116), by S. MIMURA; mechanical properties of akamatsu (*Pinus densiflora*) wood (77-81), and of obi-sugi (*C. japonica*) wood (83-87), by J. HIRUMA; mechanical properties of hardwoods (69-76), by J. HIRUMA and Y. MOCHI-ZUKI; hygroscopicity and expansion of hardwoods (89-91), by K. TAKAHASHI and (93-96) by S. INOUE, S. MORI, and Y. SUGIURI; fatty oils of forest tree seeds (117-118), and essential oil of hiba wood (119-120), by S. UCHIDA; weight of branchwood of akamatsu (123-125); cordwood volumes of firewood (127-130), bark percentage of akamatsu (131-132), and volume and form factors of akamatsu (135-141), by W. YAMAMOTO; volume of hiba (133), by W. TERAZAKI; influence of forest on stream flow (143-152), by T. KIMURA and K. YAMADA; irrigation of grass-lands (167-169), value of *kawaraketsumei* (*Cassia dimidiata*) for fodder and manure (173-178), and forage production of grasslands (179-180), by M. OHSEKO; effect of cattle and horse grazing on forest and grass-lands (153-165), by M. OHSEKO and M. SUGINO; and value of various tree leaves and herbaceous plants for fodder and manure (171-172), by M. OHSEKO and S. MORIYA. ABSTRACT AUTHORS: W. N. Sparhawk

L3 ANSWER 72 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1932:46693 CAPLUS

DN 26:46693

OREF 26:4842h-i

TI Autumn migration of phosphorus from tree leaves

AU Echevin, Robert

SO Compt. rend. (1932), 194, 2160-2

DT Journal

LA Unavailable

AB cf. C. A. 26, 1318. Soluble and insol. P were separated by extracting the frozen and powdered leaves with 10% trichloroacetic acid. Migration of P from the leaves was followed by analyzing on Aug. 24, Sept. 10, 25, 30, Oct. 8 and 19. *Ampelopsis hederacea* began to lose P about Sept. 25; *Aesculus hippocastanum* about Sept. 30; *Fagus silvatica* and *Castanea vulgaris* about Oct. 5; and *Acer platanoides* about Oct. 12. Both soluble and insol. P migrated. The total loss at leaf-fall varied from 35 to 90% of the P originally present. In general the migration began when the leaves commenced to turn yellow.

L3 ANSWER 73 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1932:46948 CAPLUS

DN 26:46948
 OREF 26:4867g-h
 TI Expectorants and the mechanism of their effect
 AU Vollmer, Hubert
 SO Klinische Wochenschrift (1932), 11, 590-4
 CODEN: KLWOAZ; ISSN: 0023-2173
 DT Journal
 LA Unavailable
 AB The ingestion of saponins, of exts. of Castanea
 vesca leaves, of K guaiacolsulfonate and expectorant
 prepns. containing these substances, causes an accumulation of water in the
 lungs. Other expectorants, such as NH4Cl, do not have this effect.

L3 ANSWER 74 OF 74 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1925:22727 CAPLUS
 DN 19:22727
 OREF 19:2970h-i
 TI Migration of nitrogenous substances from the leaves to the stems in the
 course of autumnal yellowing
 AU Combes, Raoul
 SO Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences
 (1925), 180, 2056-8
 CODEN: COREAF; ISSN: 0001-4036
 DT Journal
 LA Unavailable
 AB Leaves of Castanea vulgaris remaining on the
 trees lose about 0.3 of their N during yellowing. Leaves on
 detached branches which are allowed to remain in the open air lose about
 0.15 of their N. A portion of the N therefore returns to the stem and
 roots, and a portion is extracted by the rain and dew.

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	226.71	230.17
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-12.80	-12.80

FILE 'STNGUIDE' ENTERED AT 08:40:58 ON 20 MAR 2008
 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
 COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Mar 14, 2008 (20080314/UP).

=>